DOCUMENT RESUME

ED 042 311 EC 006 298

AUTHOR Goveia, Leonard H.; Tutko, Thomas A.
TITLE Psychiatric Rehabilitation in a Community Center.
INSTITUTION Rehabilitation Mental Health Services, Inc., Santa Clara, Calif.
PUB DATE 69
NOTE 193p.

EDRS PRICE EDRS Price MF-$0.75 HC-$9.75
DESCRIPTORS Adjustment (to Environment), *Emotionally Disturbed, Experimental Psychology, *Psychiatric Hospitals, *Psychotherapy, *Rehabilitation Centers, Research Projects, Residential Programs

ABSTRACT

A research project was designed to compare the therapeutic effectiveness of treatment in a state hospital with treatment in a supportive, residential halfway-house facility involving patients in the acute initial stages of a psychiatric episode. Psychological tests were administered to randomly assigned patients at admission to the two facilities, at discharge, and one year from admission. Demographic information was also tabulated. Results indicated that patients could be treated effectively and more quickly in the residential community setting, and that rehospitalization tended to be higher for the state hospital group. Pathology reduction was similar, but the community home group showed a more active, productive means of dealing with personal problems and greater vocational success and income after discharge. Results are seen to support the Life Management approach toward treatment, which emphasizes teaching the functional and practical aspects of everyday living leading to economic independence and emotional stability. Extensive statistical tables of comparisons of the two groups of patients are included. (KW)

ED0 42311

FINAL REPORT

Psychiatric Rehabilitation In A Community Center

U.S. PUBLIC HEALTH SERVICE RESEARCH GRANT
MH 01531 N.I.M.H.

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1969

ED0 42311

PSYCHIATRIC REHABILITATION IN A COMMUNITY CENTER

by

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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TABLE OF CONTENTS

PAGE

Preface i

List of Figures iv

List of Tables v

I. REHABILITATION MENTAL HEALTH SERVICES, INC. 1

- A. Organization History 1
- B. Current Programs 2
- C. Future Programs 3

II. COMMUNITY CARE HOME 5

- A. Why a Community Care Home 5
- B. Ideology 6
- C. Physical Description 8
- D. Staff 8
- E. Services and Community Affiliations 9
- F. Policies 10

III. RESEARCH 12

- A. Background 12
- B. Aims 14
- C. Subjects 16
- D. Experimental Design 16
- E. Investigations and Hypotheses . . 22
- F. Results 25

IV. DISCUSSION 156

- A. Individual Investigations 156
- B. Overview of Total Research Findings 163
- C. Implications 165

V. SUMMARY 171

Bibliography 174

Appendix A 176

Appendix B 179

Appendix C 184

PREFACE

This research project resulted from experience gained through many years of providing community-oriented treatment and rehabilitation programs utilizing the vehicle of the halfway-house concept. Our experience in these years raised a series of questions regarding an innovative use of a residential halfway-house facility; this use being specifically for patients in the acute initial stages of a psychiatric episode. The ultimate focus of these questions was simply whether or not a halfway-house could be used effectively as an alternative to hospitalization for some patients whose only recourse for treatment was hospitalization.

The study as described herein was devised as an experimental method of gathering and evaluating information relating to the comparative effectiveness of residential treatment and rehabilitation and that of institutional treatment for patients whose illness traditionally has required hospitalization.

A research project as extensive and comprehensive as this one, in order to achieve its objectives, requires the cooperation and participation of countless community agencies and citizens. To express our appreciation to all would be an unending task. However, there is a need for personal expressions of gratitude to some for outstanding contributions.

The participation and support of Agnews State Hospital was enthusiastic and of great value to the project. The hospital's Medical Director and Superintendent, Walter Rapaport, M.D., opened the resources of the hospital to us at the onset of the research project in 1964. Emmett Litteral, M.D., Russell Gould, M.D., and Redin Baker, M.D. were of particular assistance as were other hospital staff members.

The participation of the Adult and Child Guidance Clinic in providing psychiatric services when needed was another major contribution, as were the contributions of the State Division of Vocational Rehabilitation, Department of Welfare of Santa Clara County and San Jose Community Mental Health Services. Statistical consultation provided by Robert Clarke, Ph.D., and Mr. Richard Neville's many hours of statistical-analysis work played major roles in dealing effectively with the vast amount of data collected.

A debt of gratitude is owed to the National Institute of Mental Health (NIMH) for the financial grant which made the project possible and for its understanding and interest which led to a one year extension of the grant. The NIMH Regional office in San Francisco, particularly Mr. Ray Craig, provided the necessary support and consultation which was most encouragin and helpful to the program.

Thomas A. Tutko, Ph.D., Co-investigator; Glen Robertson, CCH Supervisor; George McCarthy, Psychological Test Examiner; and Marge Zeller, RMHS Office Manager, should be commended for the many hours of work above and beyond expectation which they dedicated to the project. Without their technical skills and perseverance, our research objectives would not have been as effectively achieved.

The development of the various treatment and rehabilitation units of the agency historically has been dependent on the judgment and courage of the agency's Board of Directors. This research project was no exception. It was made possible through the insight and direction of these men and women, all of whom have a real concern for people and the fortitude to act on their concern. For their crucial role in opening horizons for more effective psychiatric treatment, a sincere expression of gratitude is made.

L. H. G.

LIST OF FIGURES

FIGURE NO. PAGE NO.

1 49

2 60

3 70

4 80

5 90

6 103

7 135

8 139

LIST OF TABLES

TABLE NO.	PAGE NO.
1	26
2	28
3	32
4	35
5	37
6	39
7	41
8	43
9	45
10	46
11	47
12	51
13	54
14	58
15	62
16	65
17	68
18	72
19	75
20	78
21	82
22	85
23	88
24	89
25	95
26	98

TABLE NO.	PAGE NO.
27	100
28	105
29	108
30	110
31	111
32	112
33	113
34	115
35	116
36	117
37	119
38	120
39	122
40	123
41	124
42	125
43	127
44	128
45	129
46	131
47	132
48	133
49	136
50	140
51	143
52	145
53	147
54	150
55	153

I. REHABILITATION MENTAL HEALTH SERVICES, INC.

A. Organization's History

Rehabilitation Mental Health Services, Inc. (RMHS) was one of the early forces in the contemporary halfway-house movement in the United States. The agency was organized in 1953 by civic and business leaders with the assistance of members of the professional staff of Agnews State Hospital. In 1953 the agency became involved in meeting the needs of psychiatric patients who, upon discharge from the hospital, found themselves in a precarious situation due to limited funds, unemployment, poor housing and the absence of healthy family ties. The agency worked with patients primarily to find suitable housing in hotels, rooming houses, etc. It made available financial loans to patients when needed and provided opportunities for employment placement. To assist with employment placement the organization established an Employment Committee composed of representatives of business, industry and labor and other individuals with employment contacts. The function of this committee was to interview each patient with the purpose of assessing his vocational skills, to engage in vocational counseling regarding the development of interview techniques and resume composition, and to make the necessary contacts within their own industry or other industries to secure employment placement for the patient.

The services of the agency were provided through community volunteer participation and resulted in widespread and scattered residential placement of patients in the

San Jose-Santa Clara area. As the program developed in terms of larger caseloads, follow-up services, etc., it became apparent that a professional staff was needed and that the agency should move in the direction of establishing treatment and rehabilitation housing units to further increase the effectiveness of its work. In 1956 the first halfway-house of the agency, the Quarters for Men, was opened in the city of Santa Clara (current population approximately 90,000), located 50 miles south of San Francisco.

Currently the agency is a non-profit tax-exempt corporation governed by a twenty-one-member Board of Directors composed of civic leaders of the San Jose-Santa Clara community. The organization's history characterizes it as a pace-setter in community mental-health action through the continued development of its residential treatment and rehabilitation facilities and programs for psychiatric patients.

B. Current Programs

QUARTERS FOR MEN This halfway-house facility was opened in 1956 with the assistance of a three-year federal research grant from the Office of Vocational Rehabilitation (now known as the Vocational Rehabilitation Administration). The facility is located in a residential section of the city of Santa Clara and has accommodations for seven men and one live-in staff person. Its primary purpose is to work with patients leaving psychiatric hospitals--providing treatment, rehabilitation and socialization services to

. . .

assist these patients in their transition from hospital to community living.

QUARTERS FOR WOMEN This facility, opened in 1961, is a two-story home in the adjacent city of San Jose (current population 425,000) with accommodations for nine women and one live-in staff person. The services, objectives and population of this facility are similar to those of the Quarters for Men.

COMMUNITY CARE HOME This facility--the subject of this report--opened in 1964 with the assistance of a four year research grant from the National Institute of Mental Health. Primarily it is used as an alternative to hospitalization for acutely ill patients. The purpose, services and population will be discussed in greater detail in succeeding pages of this report.

ADOLESCENT RESIDENTIAL CENTER This unit includes a two-story home and a single-story home located next to each other in a residential section of the city of Santa Clara. The primary purpose of the program is to work with adolescent boys and young male adults from the ages of 16 to 21 who are experiencing emotional and adjustment problems at home, in school, and/or in the community. The facility accommodates 13 residents, one live-in housemother and two live-in college students.

C. Future Programs

RESIDENCE-WORKSHOP The agency is currently in the final stages of opening in the community a residential facility in conjunction with a workshop for severely chronic and marginal individuals with long-term histories of psychiatric illness. The plan is to locate suitable housing to accommodate approximately 15 residents and a workshop with a potential of including up to 50 clients. The basic function of this service is to develop maximum levels of functioning for chronic patients in the emotional, social and vocational areas.

II. COMMUNITY CARE HOME

A. Why a Community Care Home?

After working with residents of the Quarters for Men and the Quarters for Women for many years, it became apparent that many of the barriers which obstructed patients from achieving successful treatment and rehabilitation were related to their hospitalization. These barriers were not particularly inherent to the illness but resulted from being removed from the community. The development of these problems for the most part was unavoidable; nevertheless, for most patients the resultant impediment to rehabilitation was severe and for some insurmountable. Reference is made to the strong dependency needs which many patients develop after prolonged periods of hospitalization--needs which associate any circumstance resembling independent living with fear and panic, interfering with the achievement of rehabilitation goals. Secondly, reference is also made to social resistance, reflected through community apathy, misunderstanding and negative attitudes. The stigma of having been hospitalized in a psychiatric hospital continues as a troublesome reality. Thirdly, the niche the patient left in the community upon being hospitalized is often not there when he returns as family members and friends close ranks. Lastly, re-employment problems are frequently severe, as employers are often reluctant to re-hire a former employee and skeptical of a new applicant who is on record as having been hospitalized in a state institution.

In short, if the illness is not of itself overwhelming enough, paying the social and other consequences of having been hospitalized is.

With these observations in mind, the concept of a Community Care Home (CCH) was developed. The CCH would be a halfway-house functioning at the other end of the spectrum. The facility would accept referrals from the community who were demonstrating acute symptoms of an illness and needed to be removed from their stressful environment. It would be used as an alternative to hospitalization whenever appropriate, providing psychiatric treatment in conjunction with rehabilitation services. It would therapeutically affect the possibility for the patient to achieve recovery without being removed from his community and avoid the residual problems which too frequently arise from being hospitalized in a large institution. Further, it would offer an economy of both time and finances to the patient and to his community.

B. Ideology

Anyone involved in offering direct services in the mental-health field is soon exposed to the various puzzling aspects of the mental illness phenomenon. He finds the illness complex, reminding him of how little he actually knows and how much his treatment techniques are based on theory, often without substantiating empirical fact. But, in spite of this and the known and unknown neurological and psychological factors in human behavioral problems, one factor consistently shows itself. Emotional disturbances, thinking, attitudes, feeling, etc., are influenced by psychological and social elements of environment. As long as people must cope daily with their environment and adjust to other people, emotional tranquility will remain a slippery goal and will often be adversely affected by environmental conditions resulting in disturbances of various sorts and degrees expressed through behavioral symptoms.

These behavioral symptoms can repeatedly be traced to failures in the socialization process as it relates to establishing meaningful, satisfying relationships with people and developing what might be termed effective "life management".

The frequency of these symptoms in the diagnosed illness leads to the speculation that they may be not only symptoms--but possibly the illness itself. It would appear that--if the illness reflects psychological and social problems--then, whenever possible, the individual should be treated within the social structure from which stemmed his difficulty.

The ideal treatment setting would seem to be one which would offer services directly associated with environmental adjustments without a drastic change of environment. It would be a treatment center in the community which would make available to the patient the necessary medical (psychiatric and non-psychiatric) and rehabilitation services while offering him the kind of human interest, concern, acceptance, warmth and understanding that would be consistent with promoting improved adjustment to society. It would also be a center at which focus would be placed on daily learning experiences to assist the patient in managing his life more effectively in social, vocational, and emotional areas and to avoid creating the kinds of crisis which originally precipitated his illness. CCH was designed to be such a halfway-house treatment facility.

C. Physical Description

The Community Care Home is a two-story home in San Jose, California. The facility is located approximately one mile from the downtown area in an established residential district. It is convenient to bus lines, shopping areas and city resources. It is a large home with the capacity to house comfortably ten male and female residents. There is a full basement available for various uses and an adequate laundry area with appropriate equipment. The back yard is large, with adequate parking and a barbeque pit. The home is attractively furnished, with conventional and functional decor and a warm, homelike atmosphere.

D. Staff

Leonard H. Goveia, M.A.	Executive Director, RMHS Principal Investigator of CCH research project
Thomas A. Tutko, Ph.D.	Co-Investigator, CCH research project
Emmett B. Litteral, M.D.	Psychiatric Consultant
Glen D. Robertson, M.A.	Psychologist, CCH Supervisor

George McCarthy	Psychological Test Examiner
Marjorie B. Zeller	Office Manager
Sylvia Love	Housemother

E. Services and Community Affiliations

The CCH staff established working ties with numerous resources in the community. From these ties developed a wide range of services available to CCH residents. Contact with medical and psychiatric hospitals and clinics, private practitioners, the State Division of Vocational Rehabilitation, Goodwill Industries, State Employment Service, private employment agencies, industrial and business concerns, labor unions, the Santa Clara County Welfare Department, Santa Clara County Mental Health Services and other agencies were major sources of assistance in the development of these services. The total services available to each resident as a result of these community resources in combination with the services provided by CCH staff included:

Medical (non-psychiatric)
- consultation
- examination
- treatment
- medication supervision
- special services

Psychiatric
- evaluation
- diagnosis
- treatment
- medication supervision
- consultation

Psychological
- individual therapy
- group therapy
- psychological testing and interpretation
- family counseling
- marriage counseling

Vocational
- assessment
- counseling
- training
- workshop experience
- practice interviews in industrial setting
- employment placement

Financial Aid
- grants or loans as needed

Housing
- supportive group living including 3 meals a day

Social and Recreational Activities
- trips
- parties
- barbeques
- games

Follow-up
- on a formal or informal basis

In addition to the above-mentioned services, provision was made for full-time around-the-clock crisis coverage. A professional staff member was available at all times for residents and ex-residents alike whose circumstances required immediate attention.

F. Policies

Community Care Home policies were originally established by the residents and since then have been revised, structured and developed by the House Council. Policies are seen as guidelines and have been subject to continued re-evaluation by residents in consultation with staff. Most recent policies assign residents to various responsibilities in connection with the upkeep of their rooms, the home, kitchen facilities and yard. Residents are expected to observe the house curfew unless other arrangements are made with the staff. The use of alcohol in the house is prohibited and could jeopardize the continued residency of the client. Residents do their own ironing and share with the Housemother in the cooking responsibilities. Residents are encouraged to be up for breakfast, out of their rooms during the day, involving themselves in community-oriented activities. Residents are expected to assume the responsibility of fee payment up to their ability to do so. Policies are kept flexible and at a a minimum and are generally pointed to having residents accept levels of responsibility corresponding to and encouraging their recovery and rehabilitation.

III. RESEARCH

A.. Background

A number of changes involving therapy have been witnessed in the last several decades. Rather than an individual approach, the present emphasis is on group interaction whether in group therapy, milieu therapy or community therapy. The latter of these has become a commonly accepted part of many institutions. The therapeutic community as outlined by Jones (1953; 1958; 1961; 1968) reports success in handling large groups of patients as does Rademaeker (1948) in describing the Gheel Shrine.

A most notable development in community mental-health treatment has been the halfway-house. This treatment usually follows discharge of a patient from a hospital facility into a residential group living installation in the community. The halfway house approach represents a noted departure from traditional institutional treatment, allowing patients to continue treatment and rehabilitation while living in housing very closely resembling their own homes. Such an approach continues the treatment more realistically by preparing the patient for community life.

A number of such institutions have grown over the past decade. Richmond (1969) points out that such treatment often prepares some patients for independent living while for others it prepares them for living closely in a semi-independent setting. The functions and the type of homes have varied, but each seems to fill the growing need for treatment in a small, homelike social milieu.

Several articles have attempted to describe the nature of the halfway house (Huseth, 1961; Sharp, 1964; Richmond, 1969). The increasing numbers of such homes indicate a changing philosophy toward treatment--that which centers around the home and the community.

In some instances attempts have been made to go one step beyond this type of treatment. An example of this is the cooperative apartment house where patients share individual apartments (Hodgman and Stein, 1966). This change represents a further departure from traditional treatment and one that may possibly be more in line with independent and realistic living in terms of the patient's own life.

This changing treatment emphasis opens a number of avenues for community therapy. In fact, the role of the community as a therapeutic agent has become increasingly emphasized with the advantage of such an approach including the opportunity for the patient to maintain contacts with his job and family, and to avoid the stigma of being a "mental patient".

The Quarters, as previously described, has provided this type of link since 1956 for the patient with the community (Goveia, 1965). From observations of the Quarters programs now in progress it is known that the Quarters serves as a therapeutic "family" unit within the community. It can be an aid in helping patients to rehabilitate themselves in a shorter period of time than might be the case at a larger State institution. Other attempts have been successful using a similar although not exact approach. (Evans, Bullars and Solomon, 1961; Greenblatt, Levinson and Klerman, 1961; Meyer and Borgotta, 1959; Steinman and Hunt 1961).

Whereas the Quarters has been used as a residential treatment facility for post-hospital patients, the Community Care Home as described in this paper is a similar halfway-house used in lieu of hospitalizations for patients in the acute phases of psychiatric illness.

It is the intent of this research program to demonstrate that the CCH program is a more effective method of treatment than is hospitalization in a large institution, and provides a greater economy to the patient and the community.

B. Aims

1. General

The general aim of this research project is to compare the therapeutic effectiveness of treatment in a State hospital, Agnew State Hospital (ASH), with treatment at Community Care Home (CCH). CCH provides treatment and rehabilitation services to patients living in a supportive, residential, co-educational home. The aim is to demonstrate objectively what value might accrue to the patients from the two treatment facilities and how effective each is over a period of four years.

2. Specific

There are a number of specific aims within the project. Seven separate aspects of the program were assessed over the four year period.

The first investigation was to determine whether a halfway-house can effectively treat patients in the acute stages of their illness and be used in lieu of hospitalization.

The second investigation attempted to determine which of the two treatment facilities was more effective in reducing re-hospitalization and to compare the length of treatment for each group.

The third investigation was to determine whether CCH treatment significantly reduced pathology as compared with ASH treatment. Moreover, it was an attempt to determine changes in pathology over a period of time.

The fourth investigation was to determine whether the employability, following treatment, of CCH patients was greater than ASH patients. Also, an attempt was made to compare post-treatment income as related to both treatment settings.

The fifth investigation was an attempt to determine the relationship between treatment setting and the patient's attitude toward treatment, the installation, and mental illness.

The sixth investigation focused on the effect of the two types of treatment upon the patient's attitudes toward self, others, and the community.

The seventh investigation involved comparing successfully and unsuccessfully treated patients at CCH to determine those variables which differentiated the two groups.

C. Subjects

The subjects included in the research project consisted of 98 patients. Of these, 60 were males and 38 were females. There were 62 patients included in the CCH group. Of these, 38 were males and 24 were females. The ASH group consisted of 36 patients of which 22 were males and 14 were females. Diagnostic and demographic information regarding subjects may be found in Appendices A and B respectively.

D. Experimental Design

1. Procedure

The design of this project was to select from community sources patients whose hospitalization was imminent. Through the process of randomization patients' placement (CCH or ASH) was determined.

Patients were primarily accepted from the admission wards at ASH with the exception of those listed in Appendix C.

Professional staffs at local community hospitals and clinics were informed of the project. The admitting doctors at these installations notified CCH when patients were admitted who appeared to be eligible for the project. The psychologist from CCH gave the patient an extensive interview and determined the patient's eligibility and willingness to participate in the research project. The eligibility of the patient was based on the following criteria:

Ineligible patients were excluded whose problems were primarily:

a. Senility
b. Retardation
c. Alcoholism
d. Organic impairment
e. Homocidal or suicidal tendencies with very high risk.

Eligible patients were included:

a. who had at least minimal reality contact with some accessibility to treatment and rehabilitation
b. whose need for hospitalization was medically determined
c. whose symptomology stemmed from reaction to stressful environmental factors.

If, after the interview, the patient was considered to be eligible, the interviewing psychologist informed the patient about the project. If the patient agreed to participate, the psychologist called the CCH secretary in charge of random numbers. She, in turn, would inform the psychologist of the disposition of the patient based on the randomization process. There were separate lists of random numbers for males and females and only the secretary and Research Director had any contact with the list. Upon assigning a number to an eligible patient, it would be crossed off and the next number used for the following referral.

Following determination of patient's disposition, the psychologist would inform the patient whether he was to be hospitalized or admitted to CCH. In either case, he was told that he would be contacted by another psychologist to be given a battery of psychological tests.

The disposition of the patient was then discussed with the referring ward doctor who initiated the necessary steps to hospitalize the patient or to discharge him to CCH. If a referral originated from the community, an appointment was made to interview the patient. If the patient was eligible, he was informed about the project and the random selection. If he agreed to participate, disposition was determined and he was immediately admitted to ASH or CCH.

2. Group II Patients

Midway through the research project it was recommended by visiting consultants from the San Francisco Regional Office of National Institute of Mental Health that a second experimental group be introduced. This change was made in order that CCH could be used to maximum capacity. If a patient in the special group (Group II) passed the screening criteria, he was accepted into CCH without disposition being determined by random numbers. Because there was a possibility of differences in levels of manifest pathological behavior, comparisons were made between patients in this special group and those patients whose disposition was determined by the randomization process. Comparisons were made on the MMPI, MMPI Derived Scales and demographic data. In the event no significant differences occurred, this special group would be collapsed with those patients at CCH whose placement was determined randomly. These comparisons are discussed in Section III, F (Results).

3. Materials

Each patient was given a battery of five tests including the Wechsler Adult Intelligence Scale (WAIS), the Minnesota Multiphasic Personality Inventory (MMPI), the Rorschach, the Semantic Differential, and the Draw A Family Test (DAFT).

These tests, except for the WAIS, were repeated a second time upon leaving the installation and a third time one year from the date of entrance into the project. Thus it became possible to make comparison on three different occasions: upon entrance into treatment, upon completion of treatment, and a year following entrance into the project.

The WAIS was given primarily as a control measure to determine if both groups were intellectually equivalent. Except for the Semantic Differential, the remaining tests were given to determine the level of pathology as reflected by objective scores. In using the MMPI, t scores were used for the 13 original scales in order to combine the results of both males and females. For the Hypochondriasis, Psychopathic Deviation, Psychasthenia, Schizophrenia and Hypomania scales the K correction factor was added to each raw score. Twenty-four derived scales were used in addition to the original 13 scales. These scales were selected because ostensibly they measured changes that might occur as a result of treatment. Twenty-four different variables were selected from the Rorschach in order to measure any subtle changes that might result. The DAFT was included in the test battery as a projective device for the most part. It was not included in the statistical analysis but was used primarily as a clinical tool in understanding and treating the patient.

The instrument selected to measure attitudes was the Semantic Differential. Rather than a test, it is more a technique devised by Osgood, Succi and Tonnenbaum (1957). There were 8 different concepts involved in the investigations. For Investigation V, the concepts used were: treatment, installation and mental illness. In Investigation VI, the concepts used were: me, mother, father, mate and community. Two other concepts were noted however, even though they were not included in the investigations. These included: me as other see me, and me as I would like to be (ideal). Scores were obtained not only for the concepts themselves, but distance scores were obtained as well. The d score was derived by comparing the me score to each concept score. The highest score was subtracted from the lowest score and this was used as the d score. The assumption made in this study, as in previous studies using the Semantic Differential, was that the smaller the d score, the closer the individual to that concept. A d score of 0 would indicate that the person rated the concept and themselves exactly alike. A d score of six, the highest possible score, indicated maximum distance from or being unlike that concept.

Three different factors were involved including the evaluative, potency and activity factors. However, only the evaluative factor was used to predict in the investigations. Concept scores and d scores were computed for the other factors as well. Each individual had 19 scores--10 concept scores and nine d scores for each of the three factors or a total of 57 scores. Three scales were used for each factor giving a total of nine scales in all. Scales were selected which best reflected each factor. The selection was made statistically, i.e., the scales that correlated most with each factor and no other factor was used. Results were also computed for the CCH group comparisons for Testing I and II, I and III, and II and III. These findings will be presented separately.

In addition to the psychological testing, extensive demographic data was collected for both groups, particularly with regard to previous treatment and work history.

4. Statistics and Comparative Analyses

Two different types of analyses were completed between groups and within groups. The between groups analyses involved comparing the ASH group to the CCH group. The within group analyses involved comparing the various sets of tests within the CCH group. For example, test I was compared with test II; test I with test III, and test II with test III. These comparisons were made only when the number of tests in the group was 10 or larger. It was felt that this number was the lowest figure which would reflect stable significant differences.

Two different types of statistical techniques were used. When an average score was obtained as well as a standard deviation, a t test was used. If the score was dichotomous a chi-square test was used. Most of the variables on the demographic data were compared using chi-squares. For the remaining tests, t tests were used.

If the comparison was made between groups an uncorrelated t test was used. If the comparison was made within groups a correlated t test was used because it was a repeated measure on the same individuals. One-tailed t tests were used when the direction and specific outcomes of the two groups were predicted. Two-tailed t tests were used when neither the direction nor the outcomes were predicted.

The number of patients included in the different comparisons varied as a result of patient unavailability for data collection.

E. Investigations and Hypotheses

Investigation I

Hypothesis 1 - There will be a significantly larger number of CCH patients who will remain in the facility and be discharged into the community as compared to the number of CCH patients who will require hospitalization from CCH.

In other words, CCH will be an effective alternative to hospitalization.

Investigation II

Hypothesis 2 - The CCH group will have a significantly lower recidivism rate than will the ASH group.

Hypothesis 3 - Patients at CCH will have significantly shorter stay than will patients at ASH.

Investigation III

Hypothesis 4 - No differences in pathology will be found between the CCH group and the ASH group on the psychological tests upon entrance into the installation.

Hypothesis 5 - Significant differences in pathology will be found on the post tests between the ASH group and the CCH group, with the CCH group reflecting significantly less pathology.

Hypothesis 6 - There will be a significant reduction in pathology comparing the first test to the post tests and the second test to the third test for the CCH group.

Investigation IV

Hypothesis 7 - No differences will be found between the ASH group and the CCH group in the number of persons employed upon entrance into the installation.

Hypothesis 8 - There will be a significantly higher number of CCH patients employed upon discharge, as compared with the number of ASH patients employed upon discharge.

Hypothesis 9 - The CCH patients will have a significantly higher income upon discharge as compared with the income of the ASH patients at discharge.

Hypothesis 10 - CCH treatment will not effect a reduction in income following treatment as compared to income upon admission.

Investigation V

Hypothesis 11 - The CCH group will show a more positive attitude toward treatment and the installation and will evidence less self-identification with mental illness than will the ASH group, upon admission, discharge and one year from admission.

Hypothesis 12 - Upon completion of treatment the CCH group will show a significantly more positive attitude toward treatment and the installation and will evidence less identification with mental illness than was evidenced upon admission into the installation.

Investigation VI

Hypothesis 13 - The CCH group will show a more positive attitude toward themselves, others and the community than will the ASH group at admission, discharge and one year from admission.

Hypothesis 14 - Upon completion of treatment the CCH group will show more positive attitudes toward themselves, others and the community than was evidenced at admission.

Investigation VII

Hypothesis 15 - Successfully treated patients at CCH will have a significantly more positive attitude toward treatment and the installation at admission than will unsuccessfully treated patients.

Two exploratory comparisons were made as follows:

> Exploratory Comparison (a) A comparison will be made on psychological tests variables between CCH residents judged to be successful and unsuccessful by the CCH clinician in order to determine those variables that are related to success.
>
> Exploratory Comparison (b) A comparison will be made on the demographic variables between CCH patients judged to be successful and unsuccessful by the psychologist in order to determine those demographic variables that are related to success.

F. Results

1. Community Care Home Group I vs. Group II Comparisons

The results of the tests and demographic data comparisons are discussed independently as follows.

MMPI and MMPI Derived Scale

The results for the MMPI and the MMPI Derived Scales may be found in Tables 1 and 2 respectively. No significant difference occurs on the MMPI and only one on the MMPI Derived Scales. These results indicate chance findings. It appeared that no significant differences in pathology existed between the two groups upon entering treatment in CCH.

TABLE 1

COMPARISON OF MMPI SCALES FOR GROUP I AND GROUP II AT CCH

	Group I N=44		Group II N=18		
Variables	Mean	S.D.	Mean	S.D.	t *
L-Lie	52.74	4.82	54.78	7.30	-1.06
F-Validity	64.62	9.00	65.67	10.97	- .35
K-Correction	53.83	9.55	52.94	11.29	.29
Hypochondriasis	61.38	13.11	61.67	13.11	- .68
Depression	77.41	18.40	77.39	19.86	.002
Hysteria	68.55	11.03	66.78	12.29	.51
Psychopathic Deviate	80.95	12.19	74.78	10.92	1.89
Masculinity-Femininity	58.64	17.30	61.22	9.60	- .72
Paranoia	66.02	8.78	67.67	14.86	- .43

* Two-tailed test

TABLE 1 (Continued)

COMPARISON OF MMPI SCALES FOR GROUP I AND GROUP II AT CCH

	Group I N=44		Group II N=18		
Variables	Mean	S.D.	Mean	S.D.	t *
Psychasthenia	73.33	15.44	75.11	16.40	- .38
Schizophrenia	74.91	19.32	78.72	22.15	- .62
Hypomania	61.36	12.54	62.83	12.29	- .41
Social Introversion	59.07	16.12	64.61	15.92	-1.20

*Two-tailed test

TABLE 2

COMPARISON OF MMPI DERIVED SCALES FOR GROUP I AND GROUP II AT CCH

	Group I N=44		Group II N=18		
Variables	Mean	S.D.	Mean	S.D.	t*
Ego Strength	39.90	6.94	35.83	10.84	1.43
Anxiety Reaction	23.39	3.51	24.67	6.86	- .73
Control	28.46	5.85	24.89	7.93	1.67
Evaluation of Improvement	31.44	13.27	32.06	15.58	- .14
General Maladjustment	13.73	5.67	14.00	7.76	- .13
Impulsivity	8.90	4.06	8.28	4.74	.47
Length of Hospitalization	16.34	3.94	15.22	5.39	.77
Neuroticism	10.49	5.33	11.22	6.66	- .40
Familial Discord	5.10	2.30	4.22	2.76	1.15

*Two-tailed test

TABLE 2 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR GROUP I AND GROUP II AT CCH

	Group I N=44		Group II N=18		
Variables	Mean	S.D.	Mean	S.D.	t
Self-Sufficiency	14.93	6.92	13.89	7.98	.47
Somatization Reaction	18.46	5.45	19.00	7.84	- .26
Tolerance	17.56	4.85	13.61	6.56	2.24*
Attitude toward Others	12.56	4.13	10.67	5.18	1.34
Attitude toward Self	9.88	4.01	8.72	3.97	1.00
Dependency	30.07	9.75	30.44	13.33	- .10
Escapism	18.39	4.84	17.67	7.20	.38
Emotional Immaturity	22.12	9.56	24.33	12.79	- .64
Hostility Control	11.85	6.11	12.22	7.02	- .19

*Significant beyond .05 level, two-tailed test

TABLE 2 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR GROUP I AND GROUP II AT CCH

	Group I N=44		Group II N=18		
Variables	Mean	S.D.	Mean	S.D.	t*
Hostility	19.17	9.23	20.56	9.29	- .52
Inner Maladjustment	59.05	24.99	63.39	30.50	- .52
Neurotic Overcontrol	7.42	3.30	7.78	4.17	- .32
Need for Treatment	22.27	6.09	23.33	8.20	- .48
Neurotic Undercontrol	15.22	4.99	14.72	7.23	.26
Prediction of Change	8.00	5.08	9.22	5.72	- .76
Social Alienation	8.71	3.15	7.89	3.97	.75
Self-Alienation	8.45	2.89	10.61	10.54	- .84
Authority Problems	4.76	1.69	5.89	4.42	-1.03

*Two-tailed test

Demographic Data

The results of the demographic data analyses may be found in Tables 3 and 4. Of 24 variables only one significant difference occurred indicating chance findings. These results clearly demonstrate no significant demographic differences between the two groups.

Because of the homogeniety between the two groups in manifest pathological behavior and background demographic data, the two groups were combined into a single CCH group.

2. Comparison of Wechsler Adult Intelligence Scale between ASH and CCH Groups

Comparisons were made between ASH and CCH females, males and totals. The results may be found in Tables 5, 6 and 7 respectively. There were no significant differences beyond chance in any of the groups indicating that intelligence was not a bias factor.

3. Investigations and Hypotheses

Investigation I

Hypothesis 1 - The results may be found in Table 8. These findings clearly support the hypothesis that CCH is useful as an effective alternative to hospitalization. Of the 62 patients who entered CCH, 95% were discharged into the community, whereas only 5% needed to be returned to the hospital. The percentages were approximately the same for males (5%) and females (4%) who were rehospitalized.

TABLE 3

CHI-SQUARE COMPARISONS OF GROUPS I AND II PATIENTS AT CCH ON DEMOGRAPHIC DATA

	Female		Male		Total		
	I	II	I	II	I	II	Chi-square
Variable*	N=17	N=7	N=27	N=11	N=44	N=18	
Religion							n.s.
None	.11	.00	.19	.20	.16	.125	
Protestant	.56	.83	.52	.50	.53	.625	
Catholic	.28	.17	.22	.30	.24	.25	
Other	.06	.00	.07	.00	.07	.00	
Veteran							n.s.
Non-veteran	100	100	.44	.60	.67	.75	
Veteran	.00	.00	.56	.40	.33	.25	
Marital Status							n.s.
Single	.42	.17	.56	.64	.64	.50	
Married	.21	.17	.19	.09	.25	.125	
Divorced**	.37	.67	.25	.27	.36	.43	

*Percentile scores presented

**Includes: divorced, separated, widowed, divorced-remarried

TABLE 3 (Continued)

CHI-SQUARE COMPARISONS OF GROUPS I AND II PATIENTS AT CCH ON DEMOGRAPHIC DATA

	Female		Male		Total		
Variable*	I N=17	II N=7	I N=27	II N=11	I N=44	II N=18	Chi-square
Rank Among Siblings							n.s.
1st born	.29	.40	.41	.30	.36	.33	
Other	.71	.60	.59	.70	.64	.67	
Parents' Marital Status							n.s.
Married	.21	.40	.44	.33	.44	.36	
Divorced***	.79	.60	.56	.67	.56	.64	
Suicide							.02
None	.11	.33	.30	.73	.22	.59	(Chi-Square =5.98)
Threatened	.89	.67	.70	.27	.78	.41	
Violence							n.s.
None	.58	100	.41	.73	.48	.80	
Violence	.42	.00	.59	.27	.52	.20	
Arrests							n.s.
None	.62	.75	.45	.36	.52	.53	
Arrested	.38	.25	.55	.64	.48	.47	

*Percentile scores presented

***Includes: divorced, separated, widowed, divorced-remarried, adopted

TABLE 3 (Continued)

CHI-SQUARE COMPARISONS OF GROUPS I AND II PATIENTS AT CCH ON DEMOGRAPHIC DATA

	Female		Male		Total		
	I	II	I	II	I	II	Chi-square
Variable*	N=17	N=7	N=27	N=11	N=44	N=18	
Trouble with Law							n.s.
None	.50	.83	.34	.36	.40	.53	
Trouble with law	.50	.17	.66	.64	.60	.47	
Employment at Admission							n.s.
Unemployed	.94	.67	.77	.82	.84	.76	
Employed	.06	.33	.23	.18	.16	.24	
Non-union-Union							
Non-union	100	.83	.67	100	.80	.94	n.s.
Union	.00	.17	.33	.00	.20	.06	
Type of Job							n.s.
Unskilled	.83	.67	.50	.33	.59	.45	
Semi-skilled, skilled, or professional	.17	.33	.50	.67	.41	.55	

*Percentile scores presented

TABLE 4

t-TEST COMPARISONS OF GROUPS I AND II PATIENTS
AT CCH ON DEMOGRAPHIC DATA

Variable*	Female		Male		Total		
	I N=17	II N=7	I N=27	II N=11	I N=44	II N=18	t**
Age	26.56	28.83	27.04	30.73	26.84	30.06	n.s.
					8.07	8.19	
# of Siblings	2.47	2.00	2.92	3.10	2.75	2.75	n.s.
					2.69	2.38	
# of Patient's Children	1.72	2.20	1.22	.18	1.42	.82	n.s.
					1.72	1.35	
Age at Family Break-up	8.46	3.75	9.77	9.67	9.12	7.30	n.s.
					5.82	5.58	
Age at First Treatment	22.47	24.50	24.56	24.36	23.81	24.40	n.s.
					6.91	11.95	
Age at First Commitment	24.21	27.20	24.85	26.45	24.59	26.69	n.s.
					6.63	9.32	

*Mean scores presented: standard deviation scores presented on second line for totals

**Two-tailed test

TABLE 4 (Continued)

t-TEST COMPARISONS OF GROUPS I AND II PATIENTS AT CCH ON DEMOGRAPHIC DATA

	Female		Male		Total		
	I	II	I	II	I	II	
Variable*	N=17	N=7	N=27	N=11	N=44	N=18	t**
Years of Education	11.31	12.50	12.15	12.91	11.84	12.76	n.s.
					2.14	2.66	
# of Previous Hospitalizations	1.72	2.17	1.56	1.82	1.62	1.94	n.s.
					1.68	1.86	
Months Previous Hospitalization	6.17	14.33	6.00	12.09	6.07	12.88	n.s.
					10.29	19.81	
# of Jobs Mentioned	2.50	1.50	2.96	3.27	2.78	2.65	n.s.
					1.85	1.94	
Monthly Salary at Admission	306.27	189.20	465.30	308.30	410.60	276.50	n.s.
					205.70	235.20	
Earnings Prior Year	476.71	814.71	1778.37	600.45	1275.45	683.78	n.s.
					1506.57	569.42	

*Mean scores presented: standard deviation scores presented on second line for totals

**Two-tailed test

TABLE 5

COMPARISON OF WAIS RESULTS FOR ASH AND CCH FEMALES

	ASH N=14		CCH N=24		
Variables	Mean	S.D.	Mean	S.D.	t*
Verbal Scales					
Information	10.57	2.41	10.08	2.60	.58
Comprehension	12.43	3.32	12.08	3.01	.31
Arithmetic	8.78	1.97	9.56	3.49	- .87
Similarities	11.00	1.92	11.12	2.47	- .16
Digit Span	11.36	3.61	10.04	2.57	1.16
Vocabulary	11.86	2.44	11.36	3.04	.53

*Two-tailed test

TABLE 5 (Continued)

COMPARISON OF WAIS RESULTS FOR ASH AND CCH FEMALES

	ASH N=14		CCH N=24		
Variables	Mean	S.D.	Mean	S.D.	t*
Performance Scales					
Digit Symbol	9.86	2.38	10.04	2.76	- .22
Picture Completion	9.64	2.82	10.36	2.63	- .76
Block Design	10.71	2.55	10.20	2.68	.57
Picture Arrangement	11.14	2.90	10.48	2.27	.71
Object Assembly	9.78	2.72	9.92	2.78	- .15
Full Scales					
Verbal IQ	105.78	11.30	104.00	13.08	.43
Performance IQ	103.14	13.39	102.68	11.22	.08
Full Scale IQ	104.93	12.07	103.68	11.58	.30

*Two-tailed test

TABLE 6

COMPARISON OF WAIS RESULTS FOR ASH AND CCH MALES

Variables	ASH N=29 Mean	 S.D.	CCH N=38 Mean	 S.D.	t*
Verbal Scales					
Information	11.30	2.99	11.49	3.03	- .23
Comprehension	13.43	3.89	13.46	3.61	- .03
Arithmetic	11.43	4.31	11.23	3.12	.19
Similarities	10.91	3.41	12.12	3.06	-1.38
Digit Span	9.22	3.67	9.93	3.19	- .78
Vocabulary	11.39	3.81	12.23	3.27	- .88

*Two-tailed test

TABLE 6 (Continued)

COMPARISON OF WAIS RESULTS FOR ASH AND CCH MALES

	ASH N=29		CCH N=38		
Variables	Mean	S.D.	Mean	S.D.	t
Performance Scales					
Digit Symbol	8.39	1.85	9.09	2.20	-1.34
Picture Completion	11.22	2.89	11.19	3.37	.04
Block Design	10.69	2.51	11.51	3.06	-1.15
Picture Arrangement	11.13	2.99	10.81	2.74	.42
Object Assembly	9.74	2.22	11.07	2.67	-2.12*
Full Scales					
Verbal IQ	107.96	18.44	110.67	15.82	- .59
Performance IQ	102.91	13.34	106.14	12.57	- .93
Full Scales IQ	106.35	16.04	109.25	14.33	- .71

*Significant beyond .05 level, two-tailed test

TABLE 7

COMPARISON OF WAIS RESULTS FOR ASH AND CCH TOTAL GROUP

Variables	ASH N=36 Mean	ASH N=36 S.D.	CCH N=62 Mean	CCH N=62 S.D.	t*
Verbal Scales					
Information	11.03	2.77	10.97	2.94	.08
Comprehension	13.05	3.67	12.95	3.45	.13
Arithmetic	10.43	3.80	10.62	3.34	- .24
Similarities	10.94	2.90	11.75	2.88	-1.36
Digit Span	10.03	3.74	9.97	2.96	.07
Vocabulary	11.57	3.33	11.91	3.19	- .52

*Two-tailed test

TABLE 7 (Continued)

COMPARISON OF WAIS RESULTS FOR ASH AND CCH TOTAL GROUP

	ASH N=36		CCH N=62		
Variables	Mean	S.D.	Mean	S.D.	t*
Performance Scales					
Digit Symbol	8.94	2.16	9.44	2.44	-1.07
Picture Completion	10.62	2.93	10.88	3.12	- .42
Block Design	10.70	2.49	11.03	2.97	- .58
Picture Arrangement	11.13	2.92	10.69	2.56	.76
Object Assembly	9.76	2.38	10.65	2.75	-1.71
Full Scales					
Verbal IQ	107.13	15.97	108.22	15.12	- .34
Performance IQ	103.00	13.17	104.87	12.12	- .70
Full Scale IQ	105.81	14.50	107.20	13.57	- .47

*Two-tailed test

TABLE 8

REHOSPITALIZATION FROM CCH

N=62

	Male	Female	Total
Rehospitalized	2 (5%)	1 (4%)	3 (5%)
Not Rehospitalized	36 (95%)	23 (96%)	59 (95%)

Investigation II

Hypothesis 2 - The results may be found in Table 9. Contrary to the hypothesis, the CCH group did not have a significantly lower recidivism rate than the ASH group although the results were in the predicted direction. The CCH recidivism rate was 29% as opposed to the ASH group rate of 37%.

Hypothesis 3 - The results may be found in Table 10. There were significant differences between females, males, and the total group, all in support of the hypothesis. The average number of weeks of hospitalization for ASH females was 18.80 weeks and for ASH males was 23.00 weeks. The combined average for ASH male and female was 21.76 weeks. The CCH females remained in residence treatment for 10.13 weeks and CCH males for 13.66 weeks. The combined average for CCH males and females was 12.29 weeks. These results indicated that CCH patients remained in residence treatment for a significantly shorter period of time than ASH patients.

Investigation III

Hypothesis 4 - Three different tests were used to determine differences in pathology at admission; the MMPI, MMPI Derived Scales, and the Rorschach. The results of each test will be discussed independently.

First Testing (Admission)

MMPI The results may be found in Table 11 and in Figure 1. Two of the 13 original scales

TABLE 9

RECIDIVISM RATE

CCH	N	Total	%
Female	24	8	33
Male	38	10	26
Total	62	18	29

ASH			
Female	14	5	35
Male	24	9	38
Total	38	14	37

Chi-square = 1.00 (n.s. for totals)

TABLE 10

WEEKS OF TREATMENT

	ASH N=38		CCH N=62		
	Mean	S.D.	Mean	S.D.	t
Females	18.80	21.99	10.13	8.22	1.76*
Males	23.00	29.01	13.66	8.86	1.86*
Total	21.76	26.65	12.29	8.72	2.57**

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 11

COMPARISON OF MMPI SCALES FOR THE ASH AND CCH GROUPS AT ADMISSION

	ASH N=36		CCH N=62		
Variables	Mean	S.D.	Mean	S.D.	t
L-Lie	53.25	5.12	53.45	5.70	- .17
F-Validity	63.92	10.66	65.14	9.30	- .57
K-Correction	50.31	11.52	53.11	9.83	-1.22
Hypochondriasis	74.22	18.94	61.46	12.60	.76
Depression	72.83	18.26	77.49	18.22	-1.21
Hysteria	62.39	11.09	67.97	10.97	-2.40*
Psychopathic Deviate	74.89	13.81	78.71	11.92	-1.38
Masculinity-Femininity	56.75	15.34	59.42	15.47	- .82
Paranoia	63.08	12.68	66.55	10.51	-1.38

*Significant beyond .05 level, two-tailed test

TABLE 11 (Continued)

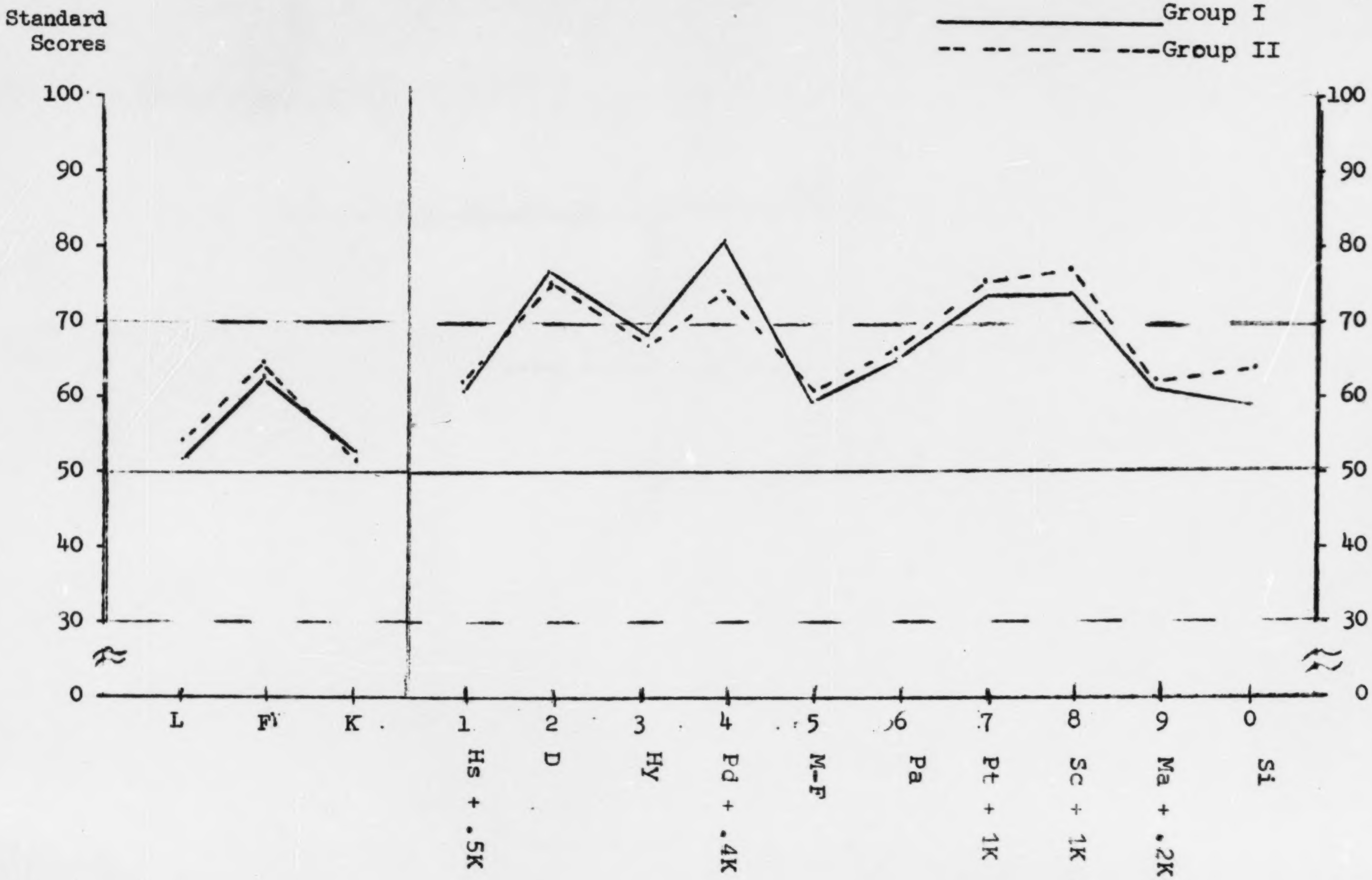
COMPARISON OF MMPI SCALES FOR THE ASH AND CCH GROUPS AT ADMISSION

	ASH N=36		CCH N=62		
Variables	Mean	S.D.	Mean	S.D.	t
Psychasthenia	66.50	12.24	73.20	15.76	-2.35 *
Schizophrenia	69.61	14.64	75.88	19.42	-1.81
Hypomania	61.14	12.57	61.62	12.33	- .18
Social Introversion	57.39	11.57	60.77	15.70	-1.22

*Significant beyond .05 level, two-tailed test

Figure 1

Comparison of MMPI Scales for Group I and Group II at CCH



were significant at the .02 level, Hysteria and Psychasthenia. The findings did not support the hypothesis; i.e., that no significant differences existed between the ASH and CCH groups upon entrance into treatment. All but one (Hypochondriasis) of the scales showed elevated scores for the CCH group compared to the ASH group. This would indicate that in addition to significantly higher scores on Hysteria and Psychasthenia, the general level of pathology was higher for the CCH group.

MMPI Derived Scales The results may be found in Table 12. There were 27 scales included in this analysis two of which were significant at the .05 level. The scales which showed significant differences between groups were: Length of Hospitalization and Prediction of Change. Having two scales significant at the .05 level would not indicate any gross differences beyond chance between the two groups, supporting the hypothesis that there were no significant differences in pathology upon entrance into treatment.

Rorschach The results may be found in Table 13. There were 24 variables included in the Rorschach. Of these, three were significant, two at the .05 level and one at the .01 level. The two at the .05 level were: (Fm) Inanimate Movement Responses and responses to the color cards, VIII, IX and X. The one at the .01 level was (M) Human Movement Responses. The results approximated chance findings since one might expect this

TABLE 12

COMPARISON OF MMPI DERIVED SCALES FOR THE ASH AND CCH GROUPS AT ADMISSION

	ASH N=36		CCH N=65		
Variables	Mean	S.D.	Mean	S.D.	t
Ego Strength	41.11	6.73	39.65	6.95	1.02
Anxiety Reaction	23.78	3.65	24.14	3.98	- .46
Control	27.19	4.73	27.40	4.85	- .19
Evaluation of Improvement	29.28	13.55	31.46	13.41	- .77
General Maladjustment	12.53	5.95	13.72	5.96	- .96
Impulsivity	8.97	4.56	8.74	4.09	.25
Length of Hospitalization	18.19	4.12	16.49	3.82	2.02*
Neuroticism	9.53	5.61	10.69	5.59	- .99
Familial Discord	5.83	5.87	4.98	2.47	.82

*Significant beyond .05 level, two-tailed test

TABLE 12 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR THE ASH AND CCH GROUPS AT ADMISSION

Variables	ASH N=36 Mean	ASH N=36 S.D.	CCH N=65 Mean	CCH N=65 S.D.	t *
Self-Sufficiency	17.44	7.35	14.97	6.89	1.64
Somatization Reaction	19.39	5.44	19.08	5.68	.27
Tolerance	15.67	5.31	16.77	5.20	- .995
Attitude toward Others	11.86	4.08	12.18	4.16	- .37
Attitude toward Self	9.78	3.22	9.91	4.01	- .18
Dependency	29.08	10.63	30.06	9.92	- .45
Escapism	18.61	6.27	18.28	5.10	.27
Emotional Immaturity	21.61	8.75	22.77	9.96	- .598
Hostility Control	11.94	5.50	11.97	6.02	- .02

*Two-tailed test

TABLE 12 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR THE ASH AND CCH GROUPS AT ADMISSION

	ASH N=36		CCH N=65		
Variables	Mean	S.D.	Mean	S.D.	t
Hostility	21.53	9.63	20.12	8.77	.72
Inner Maladjustment	58.33	27.56	60.43	25.56	- .37
Neurotic Overcontrol	6.83	2.34	7.65	3.30	-1.42
Need for Treatment	22.22	6.36	22.69	5.997	- .36
Neurotic Undercontrol	16.83	5.22	15.32	5.29	1.37
Prediction of Change	6.42	3.72	8.37	5.05	-2.19*
Social Alienation	8.22	3.36	8.43	3.13	- .30
Self-Alienation	8.22	3.80	8.11	3.15	.15
Authority Problems	4.97	1.73	4.78	1.69	.52

*Significant beyond .05 level, two-tailed test

TABLE 13

COMPARISON OF RORSCHACH RESULTS FOR ASH AND CCH GROUPS AT ADMISSION

	ASH N=35		CCH N=62		
Variables (Raw Scores)	Mean	S.D.	Mean	S.D.	t*
(R) Responses	17.53	8.14	18.74	9,95	- .64
Categories	10.39	9.45	12.09	12.81	- .75
Additional Responses	.42	.73	.35	.87	.36
Rotations	4.08	11.20	1.37	2.60	1.39
Variables (Percentages)					
(W) Whole Responses	45.67	24.68	42.72	25.31	.55
(D) Detail Responses	44.00	22.84	46.45	23.79	- .49
(Dd) Fine Detail Responses	4.47	5.21	6.15	7.98	-1.25
(P) Popular Responses	27.50	14.83	25.35	11.96	.73

*Two-tailed test

TABLE 13 (Continued)

COMPARISON OF RORSCHACH RESULTS FOR ASH AND CCH GROUPS AT ADMISSION

Variables (Percentages)	ASH N=35		CCH N=62		
	Mean	S.D.	Mean	S.D.	t
(F) Form Responses	45.53	24.59	42.51	23.48	.59
(F+) Accuracy of Form Responses	87.11	18.01	89.09	18.55	- .57
(M) Human Movement Responses	14.94	12.03	22.92	16.46	-2.73**
(FM) Animal Movement Responses	23.94	18.15	22.74	13.70	.34
(Fm) Inanimate Movement Responses	3.19	6.06	.98	2.77	2.02*
(A) Animal Responses	30.39	24.08	38.52	20.33	-1.67
(C) Color Responses	18.22	14.59	21.78	15.28	-1.13
(Y) Shading Responses	13.89	12.51	12.03	11.42	.72

**Significant beyond .01 level, two-tailed test

*Significant beyond .05 level, two tailed test

TABLE 13 (Continued)

COMPARISON OF RORSCHACH RESULTS FOR ASH AND CCH GROUPS AT ADMISSION

	ASH N=35		CCH N=62		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t
(T) Texture Responses	5.94	7.50	5.23	6.38	.47
(V) Vista Responses	5.11	8.64	2.37	4.34	1.74
(S) Figure Ground Reversals	4.25	6.91	2.31	3.77	1.53
M or F Absent	2.55	4.74	1.85	4.25	.73
Rejections	2.14	5.63	.95	3.02	1.14
Blends	7.19	10.71	3.54	5.63	1.86
Critical W Responses	3.00	3.98	2.32	4.11	.79
Responses on Cards VIII,IX,X	29.19	14.35	35.54	10.60	-2.26*

*Significant beyond .05 level, two-tailed test

number of significant differences with 24 variables, but they do verify clinical observations. ASH patients were more defensive, as indicated by (Fm) responses, while CCH patients were more emotionally responsive as reflected in the higher (M) scores as well as in greater responsiveness to cards VIII, IX and X. These results indicate that the hypothesis is not supported. There were significant differences in pathology between the two groups upon entrance into treatment, with CCH group demonstrating a greater degree of pathology.

Overall Test Results There were 64 variables in the three tests. Of these, seven were significant at the .05 level or beyond. These results exceeded chance expectances and thus the hypothesis is not supported.

Hypothesis 5 - To compare the effect of treatment on pathology in both groups, comparison of the second (discharge), and third (one year from admission) testings were made for each of the three tests (MMPI, MMPI Derived Scales, and the Rorschach) between groups.

Second Testing (Discharge)

MMPI The results may be found in Table 14 and in Figure 2. Only the L-Lie scale was significant at the .05 level. All scales of pathology were higher for the CCH group as compared to the ASH group. The general level of pathology for both groups, however, was lower than the first testing. These results were chance findings and did not support the hypothesis that the CCH

TABLE 14

COMPARISON OF MMPI SCALES FOR THE ASH AND CCH GROUPS AT DISCHARGE

	ASH N=18		CCH N=49		
Variables	Mean	S.D.	Mean	S.D.	t
L-Lie	51.39	3.33	54.29	6.78	-2.28*
F-Validity	63.28	11.68	65.55	10.06	- .71
K-Correction	51.94	11.80	53.61	10.16	- .52
Hypochondriasis	58.17	13.33	57.76	11.67	.11
Depression	70.83	15.51	71.27	15.83	- .10
Hysteria	60.67	12.85	62.61	10.75	- .56
Psychopathic Deviate	74.22	10.32	75.76	13.30	- .49
Masculinity-Femininity	58.67	9.96	59.82	14.28	- .36
Paranoia	61.17	10.24	65.29	10.61	-1.41

*Significant beyond (.05) level, one-tailed test

TABLE 14 (Continued)

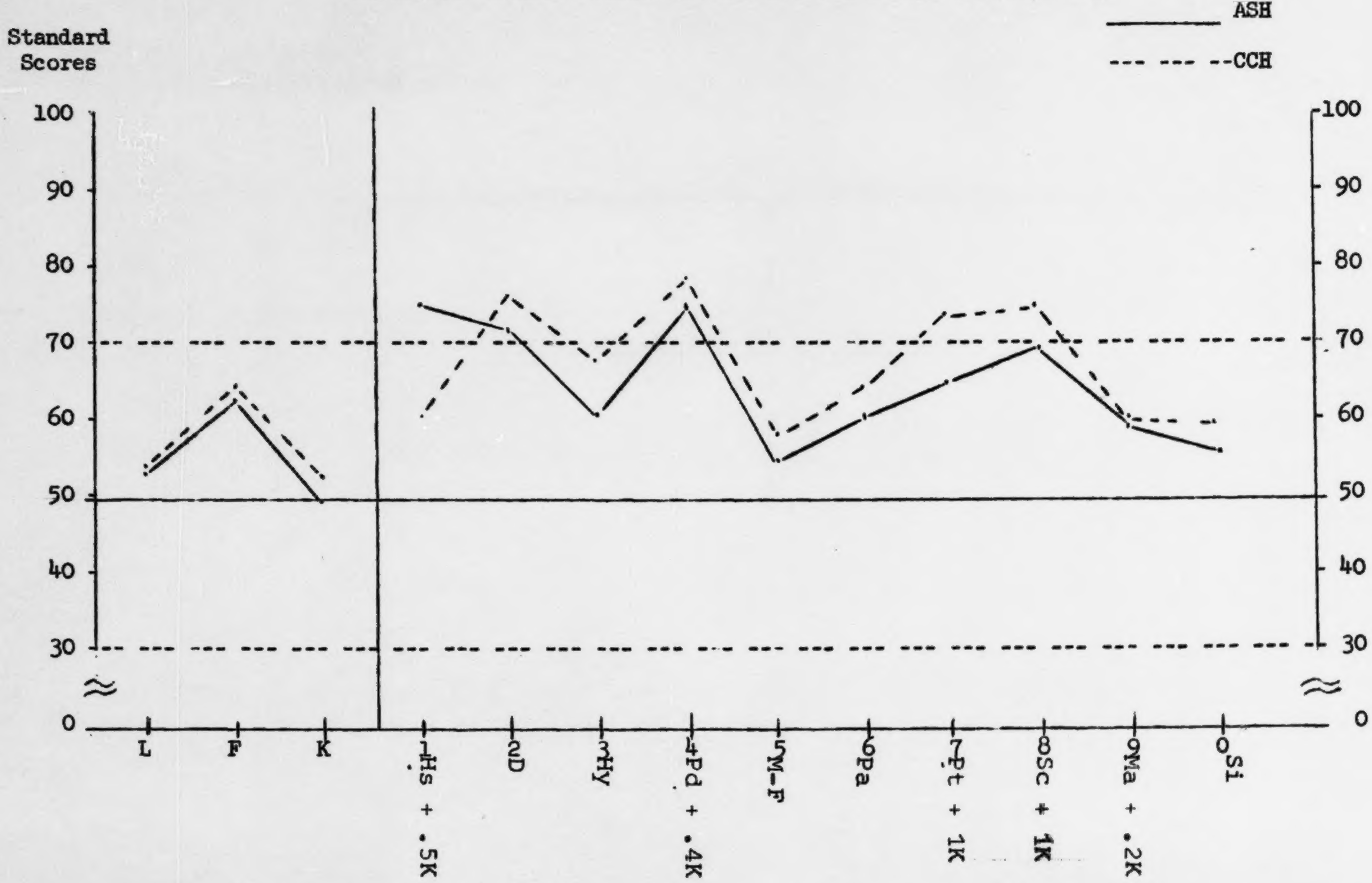
COMPARISON OF MMPI SCALES FOR THE ASH AND CCH GROUPS AT DISCHARGE

	ASH N=18		CCH N=49		
Variables	Mean	S.D.	Mean	S.D.	t*
Psychasthenia	66.56	13.56	69.39	14.03	- .73
Schizophrenia	72.61	10.89	73.59	15.48	- .28
Hypomania	62.00	11.86	65.39	13.44	- .98
Social Introversion	56.89	11.03	59.12	12.11	- .70

*One-tailed test

Figure 2

Comparison of MMPI Scales for ASH and CCH Groups at Admission



group would show significantly less pathology upon completion of treatment than would the ASH group. However, the general level of pathology was lower at discharge than at admission for both groups with CCH exhibiting greater symptomology.

MMPI Derived Scales The results may be found in Table 15. None of the 27 scales were significant. These results clearly do not support the hypothesis that CCH group would show significantly less pathology than would the ASH group upon completion of treatment.

Rorschach The results may be found in Table 16. Two of the variables were significant, including Additional Responses (.05) and Rotations (.01). These results can be expected by chance. The findings did not support the hypothesis that the CCH group would show significantly less pathology upon completion of treatment than the ASH group.

Third Testing (One Year from Admission)

MMPI The results may be found in Table 17 and in Figure 3. Of the 13 scales, two were significant at the .05 level (paranoia and schizophrenia). Eight of the ten MMPI pathology scales showed a higher elevation for the CCH group as compared to the ASH group indicating greater overall pathology for the CCH group. The two significant differences were not in the predicted direction. The CCH group showed more pathology on the Paranoia and Schizophrenia scales. The hypothesis was not supported.

TABLE 15

COMPARISON OF MMPI DERIVED SCALES FOR ASH AND CCH GROUPS AT DISCHARGE

	ASH N=18		CCH N=49		
Variables	Mean	S.D.	Mean	S.D.	t *
Ego Strength	44.06	7.89	41.31	9.16	1.15
Anxiety Reaction	22.76	3.33	23.45	4.30	- .65
Control	28.41	6.35	26.12	6.16	1.25
Evaluation of Improvement	27.06	14.32	27.22	13.80	- .04
General Maladjustment	12.35	5.96	11.63	6.09	.41
Impulsivity	8.88	5.10	8.00	4.50	.61
Length of Hospitalization	17.00	3.12	16.78	4.36	.22
Neuroticism	9.35	5.65	8.73	5.23	.38
Familial Discord	3.82	2.13	4.63	2.69	-1.21

*One-tailed test

TABLE 15 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR ASH AND CCH GROUPS AT DISCHARGE

	ASH N=18		CCH N=49		
Variables	Mean	S.D.	Mean	S.D.	t *
Self-Sufficiency	18.24	6.57	16.31	8.10	.95
Somatization Reaction	19.88	6.24	19.45	5.26	.24
Tolerance	16.47	6.57	16.31	8.10	.95
Attitude toward Others	12.53	4.30	12.41	4.07	.10
Attitude toward Self	10.29	4.40	10.82	4.20	- .41
Dependency	25.18	9.96	27.90	10.56	- .92
Escapism	18.47	5.25	18.98	10.41	- .25
Emotional Immaturity	20.47	8.99	19.69	7.91	.31
Hostility Control	11.12	5.35	11.29	5.48	- .11

*One-tailed test

TABLE 15 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR ASH AND CCH GROUPS AT DISCHARGE

	ASH N=18		CCH N=49		
Variables	Mean	S.D.	Mean	S.D.	t *
Hostility	21.18	10.61	21.10	8.66	.03
Inner Maladjustment	48.94	29.33	53.20	26.81	- .51
Neurotic Overcontrol	8.00	3.61	7.61	3.58	.37
Need for Treatment	19.12	9.71	20.76	6.81	- .62
Neurotic Undercontrol	15.35	6.28	14.78	5.09	.33
Prediction of Change	6.76	3.91	6.84	5.28	- .06
Social Alienation	8.12	2.71	8.55	2.73	- .55
Self-Alienation	7.71	3.58	7.41	3.35	.29
Authority Problems	5.82	1.81	5.20	2.23	1.10

*One-tailed test

TABLE 16

COMPARISON OF RORSCHACH RESULTS FOR ASH AND CCH GROUPS AT DISCHARGE

	ASH N=18		CCH N=49		
Variables (Raw Score)	Mean	S.D.	Mean	S.D.	t
(R) Responses	19.89	10.28	19.93	9.07	- .01
Categories	17.00	17.17	14.32	14.16	.60
Additional Responses	2.63	5.72	.28	.71	1.74*
Rotations	4.84	3.71	1.87	2.82	3.11**
Variables (Percentages)					
(W) Whole Responses	36.74	25.74	36.28	24.42	.06
(D) Detail Responses	47.37	27.50	53.87	25.16	.89
(Dd) Fine Detail Responses	5.95	6.71	5.78	7.17	.09
(P) Popular Responses	27.63	13.34	25.86	13.68	.49

*Significant beyond .05 lebel, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 16 (Continued)

COMPARISON OF RORSCHACH RESULTS FOR ASH AND CCH GROUPS AT DISCHARGE

	ASH N=18		CCH N=49		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t*
(F) Form Responses	44.10	19.46	44.03	18.30	.00
(F+) Accuracy of Form Responses	88.60	11.24	91.83	10.36	-1.15
(M) Human Movement Responses	18.74	14.55	19.87	14.51	- .29
(FM) Animal Movement Response	21.10	12.31	20.00	10.54	.34
(Fm) Inanimate Movement Response	2.74	5.92	2.23	4.19	.33
(A) Animal Responses	35.16	17.66	36.89	19.78	- .35
(C) Color Responses	21.84	11.34	22.02	13.43	- .05
(Y) Shading Responses	13.84	10.84	15.02	10.33	- .40

*One-tailed test

TABLE 16 (Continued)

COMPARISON OF RORSCHACH RESULTS FOR ASH AND CCH GROUPS AT DISCHARGE

	ASH N=18		CCH N=49		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t*
(T) Texture Responses	9.31	13.21	6.20	8.18	.94
(V) Vista Responses	3.79	4.68	2.07	4.15	1.38
(S) Figure Ground Reversals	2.84	6.08	2.87	4.20	- .02
M or F Absent	3.37	6.36	1.82	3.68	.97
Rejections	3.95	10.32	1.80	4.58	.85
Blends	6.95	6.27	4.86	7.00	1.19
Critical W Responses	2.16	3.76	2.36	3.86	- .19
Responses on Cards VIII,IX,X	31.05	9.51	33.93	11.29	-1.06

*One-tailed test

TABLE 17

COMPARISON OF MMPI SCALES FOR ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=10		CCH N=30		
Variables	Mean	S.D.	Mean	S.D.	t
L-Lie	53.90	6.95	54.63	8.06	- .27
F-Validity	60.60	13.74	64.40	9.46	- .77
K-Correction	53.10	8.66	52.67	9.66	.13
Hypochondriasis	54.20	9.92	58.33	13.04	-1.01
Depression	63.50	15.94	73.57	18.01	-1.60
Hysteria	58.90	11.76	61.10	11.02	- .50
Psychopathic Deviate	70.30	14.95	75.73	10.11	-1.02
Masculinity-Femininity	41.70	26.56	56.00	20.13	-1.49
Paranoia	57.40	10.15	65.67	12.84	-1.99*

*Significant beyond .05 level, one-tailed test

TABLE 17 (Continued)

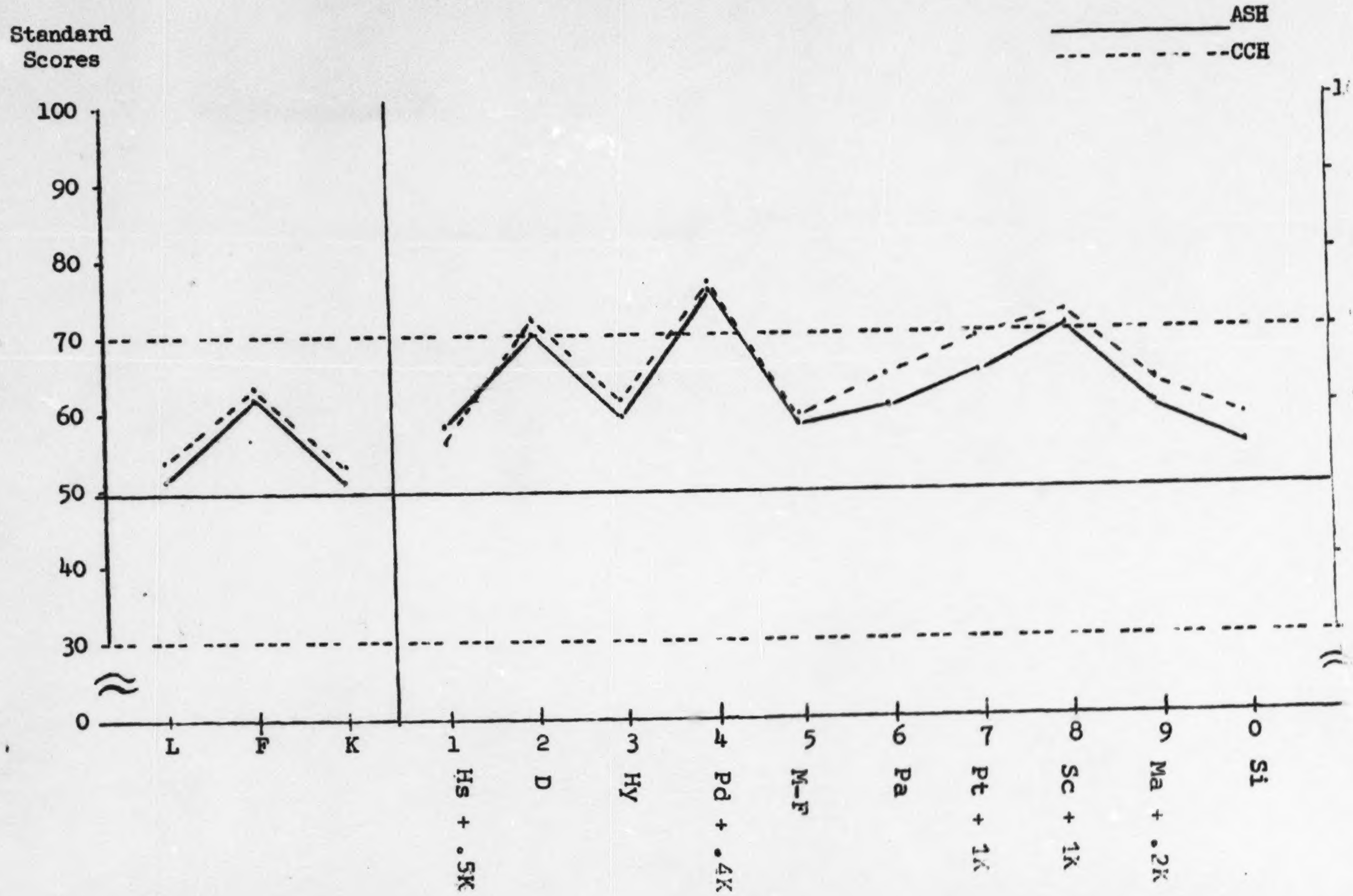
COMPARISON OF MMPI SCALES FOR ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=10		CCH N=30		
Variables	Mean	S.D.	Mean	S.D.	t
Psychasthenia	61.90	14.72	71.33	16.49	-1.63
Schizophrenia	66.10	10.77	75.27	16.31	-1.95*
Hypomania	62.00	12.16	59.63	12.90	.50
Social Introversion	56.10	12.11	62.17	12.19	1.31

*Significant beyond .05 level, one-tailed test

Figure 3

Comparison of MMPI Scales for ASH and CCH Groups at Discharge



MMPI Derived Scales The results may be found in Table 18. None of the 27 scales were significant. These results did not support the hypothesis. The two patient populations showed no significant differences in pathology one year from the onset of treatment.

Rorschach The results may be found in Table 19. One of the 24 variables was significant, (Fm) Animal Movement Responses, át the .01 level. The findings did not support the hypothesis.

Overall Test Results Three of the 64 variables were significant on second testing (discharge) and three of 64 variables were significant on third testing (one year from admission). These results did not support the hypothesis that CCH group would show less pathology than ASH group on post tests.

Hypothesis 6 - Three different comparisons were made within the CCH group. The first testing was compared to the second--the first testing to the third--and the second to the third testing. The results of these comparisons are as follows:

First vs Second Testing (Admission vs. Discharge)

MMPI The results may be found in Table 20 and in Figure 4. These findings indicate an overall drop in pathology as a result of CCH treatment with the exception of the Hypomania scale which shows a significant increase. Nine of the ten scales show a drop in the level of pathology. The four scales which show

TABLE 18

COMPARISON OF MMPI DERIVED SCALES FOR THE ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=10		CCH N=30		
Variables	Mean	S.D.	Mean	S.D.	t*
Ego Strength	41.70	5.91	40.59	6.42	.48
Anxiety Reaction	24.50	4.03	24.14	4.32	.23
Control	27.00	5.37	28.31	4.68	- .66
Evaluation of Improvement	23.30	14.38	29.03	13.49	-1.06
General Maladjustment	9.20	4.76	11.90	4.78	-1.47
Impulsivity	7.50	3.31	8.59	3.69	- .83
Length of Hospitalization	16.70	3.06	17.10	3.67	- .32
Neuroticism	8.20	4.78	9.31	4.58	- .61
Familial Discord	4.40	1.26	4.93	2.53	- .83

*One-tailed test

TABLE 18 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR THE ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=10		CCH N=30		
Variables	Mean	S.D.	Mean	S.D.	t*
Self-Sufficiency	18.10	6.62	15.38	7.01	1.06
Somatization Reaction	20.60	4.27	18.48	6.12	1.15
Tolerance	18.30	5.10	17.38	5.70	.46
Attitude toward Others	13.70	5.54	12.07	4.53	.80
Attitude toward Self	11.50	4.30	10.31	4.54	.71
Dependency	27.10	11.36	29.66	10.45	- .60
Escapism	16.30	5.14	18.72	5.14	-1.23
Emotional Immaturity	18.50	7.40	20.52	7.07	- .72
Hostility Control	10.20	6.09	12.21	4.78	- .90

*One-tailed test

TABLE 18 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR THE ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=10		CCH N=30		
Variables	Mean	S.D.	Mean	S.D.	t*
Hostility	19.40	7.57	19.90	9.39	- .16
Inner Maladjustment	49.70	25.29	56.41	26.41	- .69
Neurotic Overcontrol	6.80	3.74	8.03	3.49	- .88
Need for Treatment	19.50	5.36	21.17	6.01	- .79
Neurotic Undercontrol	14.00	3.62	15.03	5.17	- .67
Prediction of Change	5.60	3.53	6.76	3.73	- .84
Social Alienation	6.50	3.37	7.83	2.88	-1.06
Self-Alienation	6.20	3.82	6.72	3.37	- .37
Authority Problems	5.40	1.71	4.66	1.56	1.16

*One-tailed test

TABLE 19

COMPARISON OF RORSCHACH RESULTS FOR ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=10		CCH N=30		
Variables (Raw Score)	Mean	S.D.	Mean	S.D.	t*
(R) Responses	20.60	10.52	19.50	8.48	.29
Categories	17.80	18.27	14.23	15.66	.53
Additional Responses	.20	.63	1.10	3.07	-1.48
Rotations	7.50	10.67	3.67	7.00	1.01
Variables (Percentages)					
(W) Whole Responses	47.50	27.74	35.53	21.93	1.18
(D) Detail Responses	46.60	20.85	57.60	21.18	-1.38
(Dd) Fine Detail Responses	5.10	6.54	5.30	6.99	- .08
(P) Popular Responses	27.60	16.67	25.67	12.02	.32

*One-tailed test

TABLE 19 (Continued)

COMPARISON OF RORSCHACH RESULTS FOR ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=10		CCH N=30		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t
(F) Form Responses	39.10	15.88	43.87	18.43	- .75
(F+) Accuracy of Form Responses	93.09	8.54	95.58	5.75	-1.05
(M) Human Movement Responses	18.30	15.05	19.50	15.75	- .21
(FM) Animal Movement Responses	13.70	7.44	23.60	14.46	-2.71**
(Fm) Inanimate Movement Responses	1.70	3.59	.50	1.55	.97
(A) Animal Responses	39.50	15.23	43.23	16.34	- .63
(C) Color Responses	24.00	10.50	20.93	10.73	.76
(Y) Shading Responses	15.90	11.34	15.03	12.28	.20

**Significant beyond .01 level, one-tailed test

TABLE 19 (Continued)

COMPARISON OF RORSCHACH RESULTS FOR ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=10		CCH N=30		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t*
(T) Texture Responses	8.40	7.07	4.90	5.73	1.35
(V) Vista Responses	4.80	7.31	1.67	3.49	1.24
(S) Figure Ground Reversals	4.20	9.45	4.03	8.82	.05
M or F Absent	8.70	12.32	2.40	4.11	1.51
Rejections	00.00	00.00	2.37	7.33	.00
Blends	4.20	5.27	4.07	5.50	.07
Critical W Responses	2.50	3.44	2.53	5.06	- .02
Responses on Cards VIII,IX,X	32.50	7.49	33.70	8.13	- .41

*One-tailed test

TABLE 20

COMPARISON OF MMPI SCALES FROM ADMISSION TO DISCHARGE FOR CCH GROUP

Variables	Admission N=47 Mean	 S.D.	Discharge N=47 Mean	 S.D.	t
L-Lie	53.98	6.28	54.13	6.87	- .18
F-Validity	65.26	9.43	65.83	10.18	- .42
K-Correction	53.60	10.43	53.53	10.28	.05
Hypochondriasis	61.30	12.37	57.66	11.01	1.83 *
Depression	78.30	19.11	71.47	16.12	2.89 **
Hysteria	68.26	11.00	62.38	10.84	3.86 **
Psychopathic Deviate	78.19	10.90	75.43	13.34	1.55
Masculinity-Femininity	60.47	15.78	59.64	14.49	.64
Paranoia	66.32	9.62	65.75	10.36	.38

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 20 (Continued)

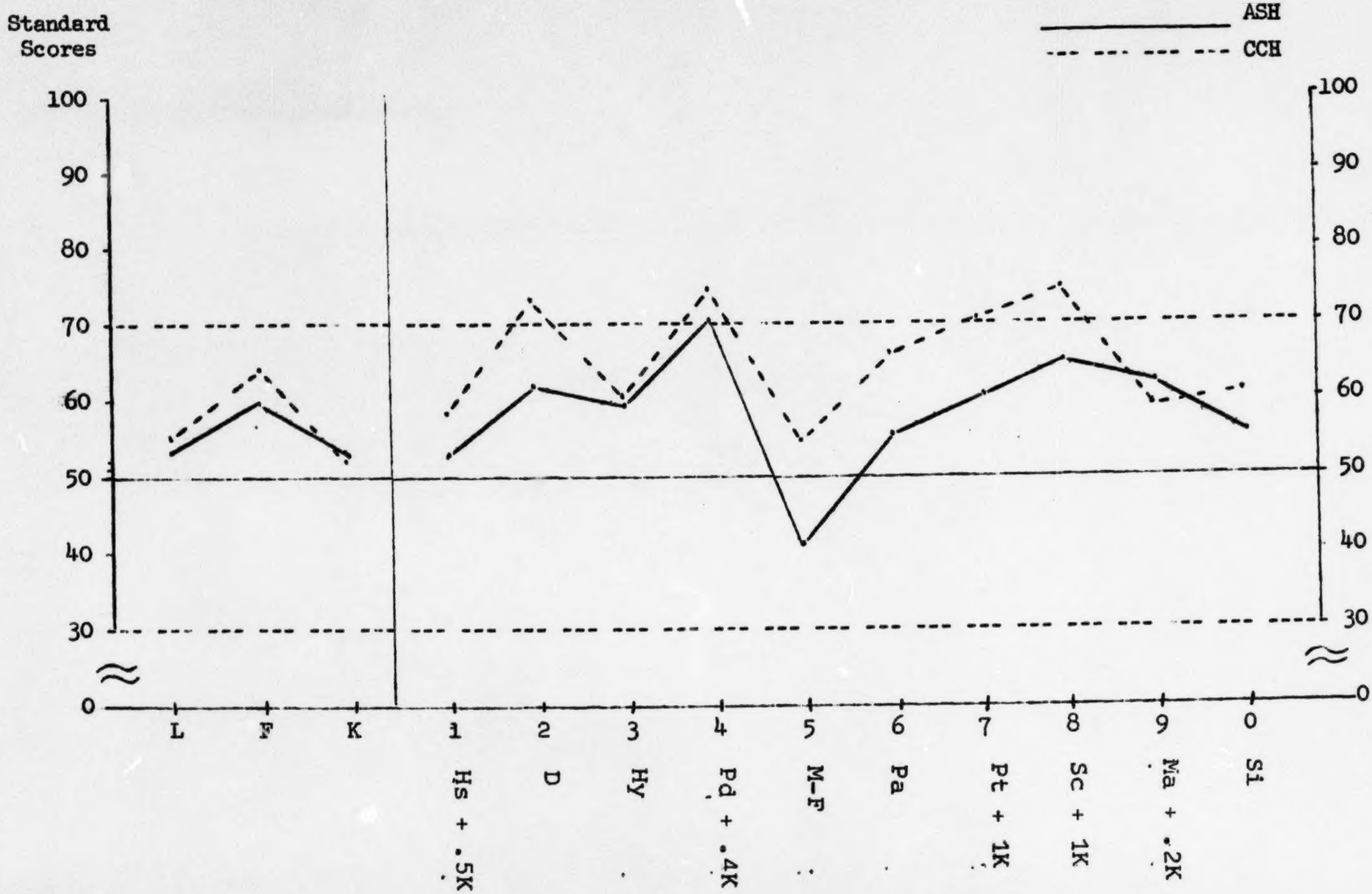
COMPARISON OF MMPI SCALES FROM ADMISSION TO DISCHARGE FOR CCH GROUP

Variables	Admission N=47		Discharge N=47		
	Mean	S.D.	Mean	S.D.	t
Psychasthenia	73.62	16,82	69.87	14.12	1.63
Schizophrenia	76.30	20.17	73.87	15.70	.83
Hypomania	61.17	12.80	65.17	13.67	-2.13•
Social Introversion	62.19	16.17	59.36	12.28	1.57

•Significant beyond .05 level, one-tailed test

Figure 4

Comparison of MMPI Scales for CCH Group on Admission and One Year from Admission



significant changes are: Hypochondriasis, Depression, Hysteria and Hypomania. These results support the hypothesis that CCH group would demonstrate a significant reduction in pathology following treatment.

MMPI Derived Scales The results may be found in Table 21. Seven of the 27 derived scales showed significant changes. There was a significant increase in Evaluation of Improvement (.01), General Maladjustment (.01), Neuroticism (.01), Dependency (.05), Emotional Immaturity (05), Need for Treatment (.05) and Prediction of Change (.05). These findings were in the opposite direction of the hypothesis that CCH group would demonstrate significant reduction in pathology following treatment.

Rorschach The results may be found in Table 22. Nine variables showed significant changes. Six of these nine were in support of the hypothesis. These included: Detail Responses (.05), Blends (.05), Additional Responses (.05), Critical W Responses (.01), Fm-Inanimate Movement Responses (.01), T-Texture Responses (.01). The remaining three were not in the predicted direction of the hypothesis. These were: Y-Shading Responses (.01), Rejections (.01) and S-Figure Ground Reversals (.01).

First Testing vs. Third Testing (Admission vs. One Year From Admission

MMPI The results may be found in Table 23 and in Figure 5. Nine of the ten scales showed a decrease in pathology from the first to third testing.

TABLE 21

COMPARISON OF MMPI DERIVED SCALES FROM ADMISSION TO DISCHARGE FOR CCH GROUP

	Admission N=47		Discharge N=47		
Variables	Mean	S.D.	Mean	S.D.	t
Ego Strength	41.17	9.26	40.04	7.31	.93
Anxiety Reaction	23.57	4.31	24.43	4.01	-1.45
Control	26.19	6.29	27.43	5.84	-1.58
Evaluation of Improvement	27.66	13.88	31.51	14.22	-2.52**
General Maladjustment	11.77	6.16	13.79	6.06	-2.42**
Impulsivity	8.17	4.50	8.43	4.13	- .44
Length of Hospitalization	16.74	4.39	16.32	4.03	.94
Neuroticism	8.87	5.23	10.64	5.47	-2.60**
Familial Discord	4.73	2.72	5.04	2.39	- .86

**Significant beyond .01 level, one-tailed test

TABLE 21 (Continued)

COMPARISON OF MMPI DERIVED SCALES FROM ADMISSION TO DISCHARGE FOR CCH GROUP

	Admission N=47		Discharge N=47		
Variables	Mean	S.D.	Mean	S.D.	t
Self-Sufficiency	16.02	8.08	14.55	7.51	1.65
Somatization Reaction	19.30	5.29	19.17	6.00	.15
Tolerance	17.04	5.57	17.13	5.18	- .14
Attitude toward Others	12.34	4.10	12.21	3.90	.23
Attitude toward Self	10.72	4.24	10.09	4.18	1.32
Dependency	28.09	10.59	30.17	10.66	-1.79*
Escapism	19.15	10.58	17.83	5.27	.85
Emotional Immaturity	19.85	8.02	22.36	9.84	-1.99*
Hostility Control	11.45	5.53	11.91	6.48	- .53

*Significant beyond .05 level, one-tailed test

TABLE 21 (Continued)

COMPARISON OF MMPI DERIVED SCALES FROM ADMISSION TO DISCHARGE FOR CCH GROUP

	Admission N=47		Discharge N=47		
Variables	Mean	S.D.	Mean	S.D.	t
Hostility	21.13	8.71	19.38	8.67	1.57
Inner Maladjustment	53.89	26.94	58.81	26.05	-1.37
Neurotic Overcontrol	7.68	3.64	8.06	3.31	-1.00
Need for Treatment	20.70	6.87	21.94	5.92	-1.89*
Neurotic Undercontrol	14.83	5.14	15.23	5.21	- .62
Prediction of Change	7.00	5.33	8.36	5.24	-2.20*
Social Alienation	8.64	2.74	8.47	3.28	.34
Self Alienation	7.50	3.43	7.87	3.17	- .78
Authority Problems	5.28	2.27	4.91	1.50	1.14

*Significant beyond .05 level, one-tailed test

TABLE 22

COMPARISON OF RORSCHACH RESULTS FROM ADMISSION TO DISCHARGE FOR CCH GROUP

	Admission N=49		Discharge N=49		
Variables (Raw Score)	Mean	S.D.	Mean	S.D.	t
(R) Responses	19.27	8.32	19.16	7.75	.12
Categories	13.11	14.16	12.64	11.84	.77
Additional Responses	.60	1.26	1.60	.84	-1.93*
Rotations	2.46	3.16	3.61	3.13	-1.56
Variables (Percentages)					
(W) Whole Responses	40.51	24.37	36.57	24.50	1.25
(D) Detail Responses	51.91	21.99	56.98	21.92	-1.78*
(Dd) Fine Detail Responses	8.83	9.85	11.08	5.06	-1.07
(P) Popular Responses	25.64	10.26	27.53	12.91	-1.09

*Significant beyond .05 level, one-tailed test

TABLE 22 (Continued)

COMPARISON OF RORSCHACH RESULTS FROM ADMISSION TO DISCHARGE FOR CCH GROUP

Variables (Percentages)	Admission N=49		Discharge N=49		
	Mean	S.D.	Mean	S.D.	t
(F) Form Responses	45.20	23.20	44.27	18.65	.32
(F+) Accuracy of Form Responses	90.43	16.29	91.84	10.26	- .62
(M) Human Movement Responses	23.61	16.31	21.46	14.34	1.12
(FM) Animal Movement Responses	21.96	12.70	20.26	9.59	.86
(Fm) Inanimate Movement Responses	2.38	3.50	7.85	4,88	-3.95**
(A) Animal Responses	41.47	15.39	42.56	15.05	- .41
(C) Color Responses	23.07	16.26	23.96	12.92	- .37
(Y) Shading Responses	11.30	9.72	16.16	9.46	-2.92**

**Significant beyond .01 level, one-tailed test

TABLE 22 (Continued)

COMPARISON OF RORSCHACH RESULTS FROM ADMISSION TO DISCHARGE FOR CCH GROUP

	Admission N=49		Discharge N=49		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t
(T) Texture Responses	6.28	7.47	11.60	8.47	-2.72**
(V) Vista Responses	5.25	5.58	7.25	4.81	-1.09
(S)1 Figure Ground Reversals	4.72	4.18	7.67	3.65	-2.74**
M or F Absent	4.33	5.66	7.00	3.69	-1.29
Rejections	4.11	5.95	11.22	5.02	-5.48**
Blends	5.86	7.45	9.68	6.96	-2.22*
Critical W Responses	2.50	4.12	7.06	3.61	-5.54**
Responses on Cards VIII,IX,X	36.10	10.48	34.25	10.42	1.38

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 23

COMPARISON OF MMPI SCALES FROM ADMISSION TO ONE YEAR FROM ADMISSION FOR THE CCH GROUP

	Admission N=27		One Year N=27		
Variables	Mean	S.D.	Mean	S.D.	t
L-Lie	54.19	7.02	55.04	8.40	- .44
F-Validity	65.57	8.44	64.60	9.06	.47
K-Correction	54.11	9.18	52.41	9.98	.75
Hypochondriasis	60.93	11.31	56.85	11.64	1.59
Depression	81.41	19.44	72.81	18.42	2.20•
Hysteria	67.48	13.03	61.63	11.48	2.31•
Psychopathic Deviate	78.70	12.04	75.19	10.11	1.45
Masculinity-Femininity	59.68	17.44	60.88	13.35	- .38
Paranoia	67.63	8.91	66.26	12.57	.45

•Significant beyond .05 level, one-tailed test

TABLE 23 (Continued)

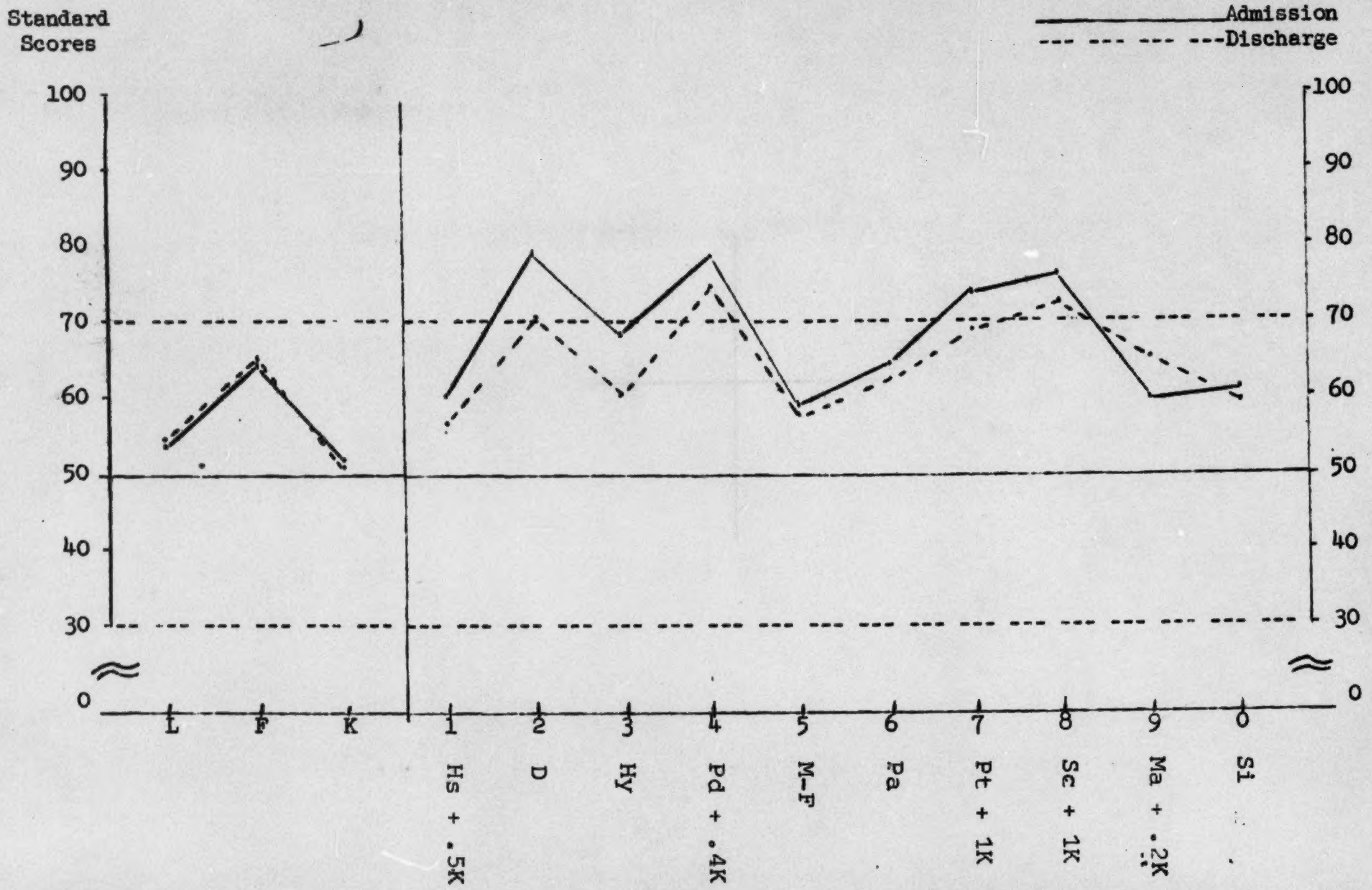
COMPARISON OF MMPI SCALES FROM ADMISSION TO ONE YEAR FROM ADMISSION FOR THE CCH GROUP

	Admission N=27		One Year N=27		
Variables	Mean	S.D.	Mean	S.D.	t
Psychasthenia	76.04	15.82	70.04	15.87	1.70*
Schizophrenia	76.81	20.17	74.52	16.77	.55
Hypomania	59.15	9.08	59.07	10.87	.03
Social Introversion	64.74	12.14	61.11	11.65	1.36

*Significant beyond .05 level, one-tailed test

Figure 5

Comparison of MMPI Scales for CCH Group on Admission and Discharge



Three of these were significant at the .05 level, including Depression, Hysteria, and Psychasthenia. These results support the hypothesis.

MMPI Derived Scales The results may be found in Table 24. Four of the five scales were in support of the hypothesis. General Maladjustment (.05), Neuroticism (.05), Prediction of Change (.01), and Self-Alienation (.05) significantly decreased indicating improvement and a drop in general level of pathology. Length of Hospitalization significantly increased, which was not in support of the hypothesis.

Rorschach The results may be found in Table 25. Nine of the 24 variables showed a significant increase. Six of these nine were in support of the hypothesis. These included: Blends (.05), D-Detail Responses (.01), F+-Accuracy of Form Responses (.05), A-Animal Responses (.01), Additional Responses (.05) and Rotations (.01). The remaining three were not in the predicted direction of the hypothesis. These were: Y-Shading Responses (.05), M or F Absent (.01), and Rejections (.05).

Second vs. Third Testing (Discharge vs. One Year From Admission

MMPI and MMPI Derived Scales The results may be found in Tables 26 and 27 and in Figure 6. Only Hypomania (.05) on the MMPI test and Control (.05) and Social Alienation (.05) on the MMPI Derived Scale showed significant changes in the predicted direction of reduction

TABLE 24

COMPARISON OF MMPI DERIVED SCALES FROM ADMISSION TO ONE YEAR FROM ADMISSION FOR CCH GROUP

	Admission N=27		One Year N=27		
Variables	Mean	S.D.	Mean	S.D.	t
Ego Strength	39.31	7.72	40.59	6.42	-1.03
Anxiety Reaction	24.72	4.51	24.14	4.32	.78
Control	27.76	5.51	28.31	4.68	- .62
Evaluation of Improvement	31.90	13.37	29.03	13.49	1.00
General Maladjustment	14.14	5.87	11.89	4.78	2.03*
Impulsivity	8.14	3.32	8.89	3.36	-1.30
Length of Hospitalization	15.97	3.73	17.10	3.76	-1.71*
Neuroticism	11.24	5.46	9.31	4.58	2.02*
Familial Discord	5.10	2.55	4.93	2.53	.32

*Significant beyond .05 level, one-tailed test

TABLE 24 (Continued)

COMPARISON OF MMPI DERIVED SCALES FROM ADMISSION TO ONE YEAR FROM ADMISSION FOR CCH GROUP

Variables	Admission N=27 Mean	Admission N=27 S.D.	One Year N=27 Mean	One Year N=27 S.D.	t*
Self-Sufficiency	14.34	7.12	15.38	7.01	- .84
Somatization Reaction	18.07	5.36	18.48	6.12	- .41
Tolerance	17.83	4.71	17.38	5.70	.49
Attitude toward Others	12.41	3.60	12.07	4.53	.37
Attitude toward Self	9.31	4.30	10.31	4.54	-1.17
Dependency	31.66	9.98	29.66	10.45	1.06
Escapism	18.00	4.84	18.72	5.14	- .73
Emotional Immaturity	22.07	8.23	20.52	7.07	1.00
Hostility Control	11.86	5.09	12.21	4.78	- .31

*One-tailed Test

TABLE 24 (Continued)

COMPARISON OF MMPI DERIVED SCALES FROM ADMISSION TO ONE YEAR FROM ADMISSION FOR CCH GROUP

Variables	Admission N=27 Mean	Admission N=27 S.D.	One Year N=27 Mean	One Year N=27 S.D.	t
Hostility	19.38	7.84	19.90	9.39	- .33
Inner Maladjustment	59.55	25.11	56.41	26.41	.57
Neurotic Overcontrol	8.52	3.54	8.03	3.49	.85
Need for Treatment	22.69	6.04	21.17	6.01	1.14
Neurotic Undercontrol	15.31	4.68	15.03	5.17	.33
Prediction of Change	8.79	5.26	6.76	3.73	2.41*
Social Alienation	8.52	2.71	7.83	2.88	1.02
Self-Alienation	8.21	3.36	6.72	3.37	2.03*
Authority Problems	4.52	1.70	4.66	1.56	- .59

*Significant beyond .05 level, one-tailed test

TABLE 25

COMPARISON OF RORSCHACH RESULTS FROM ADMISSION TO ONE YEAR FROM ADMISSION FOR THE CCH GROUP

	Admission N=23		One Year N=23		
Variables (Raw Score)	Mean	S.D.	Mean	S.D.	t
(R) Responses	19.65	9.53	20.09	9.53	- .19
Categories	16.13	18.95	8.48	2.95	1.88
Additional Responses	.57	1.13	2.43	1.40	-2.41*
Rotations	1.42	2.54	5.25	3.55	-3.23**
Variables (Percentages)					
(W) Whole Responses	38.43	23.00	34.00	20.83	.79
(D) Detail Responses	50.50	20.30	62.18	16.67	-2.91**
(Dd) Fine Detail Responses	12.62	9.85	10.46	7.29	.56
(P) Popular Responses	24.00	9.20	26.26	12.58	-1.08

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 25 (Continued)

COMPARISON OF RORSCHACH RESULTS FROM ADMISSION TO ONE YEAR FROM ADMISSION FOR THE CCH GROUP

	Admissions N=23		One Year N=23		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t
(F) Form Responses	46.39	25.42	46.61	19.50	- .04
(F+) Accuracy of Form Responses	87.64	19.81	95.58	5.75	-2.03*
(M) Human Movement Responses	21.95	14.27	24.85	15.28	-1.15
(FM) Animal Movement Responses	24.82	13.65	24.32	13.23	.13
(Fm) Inanimate Movement Responses	00.00	00.00	4.50	.71	00.00
(A) Animal Responses	27.61	22.86	42.17	16.68	-3.12**
(C) Color Responses	19.73	17.80	18.23	8.96	.46
(Y) Shading Responses	9.00	8.82	14.24	11.34	-1.94*

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one tailed test

TABLE 25 (Continued)

COMPARISON OF RORSCHACH RESULTS FROM ADMISSION TO ONE YEAR FROM ADMISSION FOR THE CCH GROUP

	Admission N=23		One Year N=23		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t
(T) Texture Responses	4.64	5.92	7.64	4.11	-1.41
(V) Vista Responses	3.67	4.80	7.67	3.67	1.34
(S) Figure Ground Reversals	4.22	4.41	11.22	13.45	-1.68
M or F Absent	1.43	3.78	8.43	3.60	-3.27**
Rejections	5.60	5.32	14.20	13.39	-1.83*
Blends	3.33	5.31	7.33	2.87	-2.29*
Critical W Responses	2.00	2.83	8.20	7.29	-1.53
Responses on Cards VIII,IX,X	32.91	8.29	32.17	7.64	.31

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 26

COMPARISON OF MMPI SCALES FROM DISCHARGE TO ONE YEAR FROM ADMISSION FOR CCH GROUP

	Discharge N-27		One Year N=27		
Variables	Mean	S.D.	Mean	S.D.	t*
L-Lie	53.85	7.15	55.15	8.35	-1.27
F-Validity	64.41	8.89	64.56	9.43	- .09
K-Correction	52.85	9.31	52.56	9.72	.17
Hypochondriasis	58.48	12.50	58.41	13.13	.03
Depression	72.56	17.51	75.41	17.10	- .69
Hysteria	63.04	10.91	61.22	10.57	1.06
Psychopathic Deviate	77.48	14.88	75.59	10.18	.64
Masculinity-Femininity	58.19	15.23	60.62	13.97	-1.50
Paranoia	66.63	10.23	66.00	12.06	.25

*One-tailed test

TABLE 26 (Continued)

COMPARISON OF MMPI SCALES FROM DISCHARGE TO ONE YEAR FROM ADMISSION FOR CCH GROUP

	Discharge N=27		One Year N=27		
Variables	Mean	S.D.	Mean	S.D.	t
Psychasthenia	69.52	14.86	71.85	15.59	- .74
Schizophrenia	71.04	14.98	75.59	15.54	-1.29
Hypomania	65.44	12.70	60.70	12.50	1.92*
Social Introversion	60.78	11.31	61.81	11.98	- .49

*Significant beyond .05 level, one-tailed test

TABLE 27

COMPARISON OF MMPI DERIVED SCALES FROM DISCHARGE TO ONE YEAR FROM ADMISSION FOR CCH GROUP

	Discharge N=26		One Year N=26		
Variables	Mean	S.D.	Mean	S.D.	t
Ego Strength	40.58	7.77	40.92	6.06	- .22
Anxiety Reaction	24.19	4.32	23.85	3.95	.47
Control	26.85	6.10	28.65	4.68	-2.31*
Evaluation of Improvement	29.38	12.33	29.31	12.81	.03
General Maladjustment	12.12	5.55	11.92	4.19	.20
Impulsivity	8.56	4.65	8.96	3.45	- .60
Length of Hospitalization	17.00	3.49	17.19	3.53	- .32
Neuroticism	9.31	5.24	9.27	4.10	.04
Familial Discord	4.73	2.84	4.77	2.49	- .08

*Significant beyond .05 level, one-tailed test

TABLE 27 (Continued)

COMPARISON OF MMPI DERIVED SCALES FROM DISCHARGE TO ONE YEAR FROM ADMISSION FOR CCH GROUP

	Discharge N=26		One Year N=26		
Variables	Mean	S.D.	Mean	S.D.	t*
Self-Sufficiency	15.27	7.03	15.27	7.05	-0.00
Somatization Reaction	18.88	4.55	18.38	6.15	.49
Tolerance	18.27	4.59	17.58	5.54	.88
Attitude toward Others	12.65	3.51	12.08	4.58	.75
Attitude toward Self	10.58	3.80	10.15	4.42	.50
Dependency	30.08	8.15	29.54	10.61	.25
Escapism	18.04	6.10	18.84	5.24	- .82
Emotional Immaturity	20.88	7.14	20.27	6.93	.46
Hostility Control	11.81	5.78	12.15	4.65	- .32

*One-tailed test

TABLE 27 (Continued)

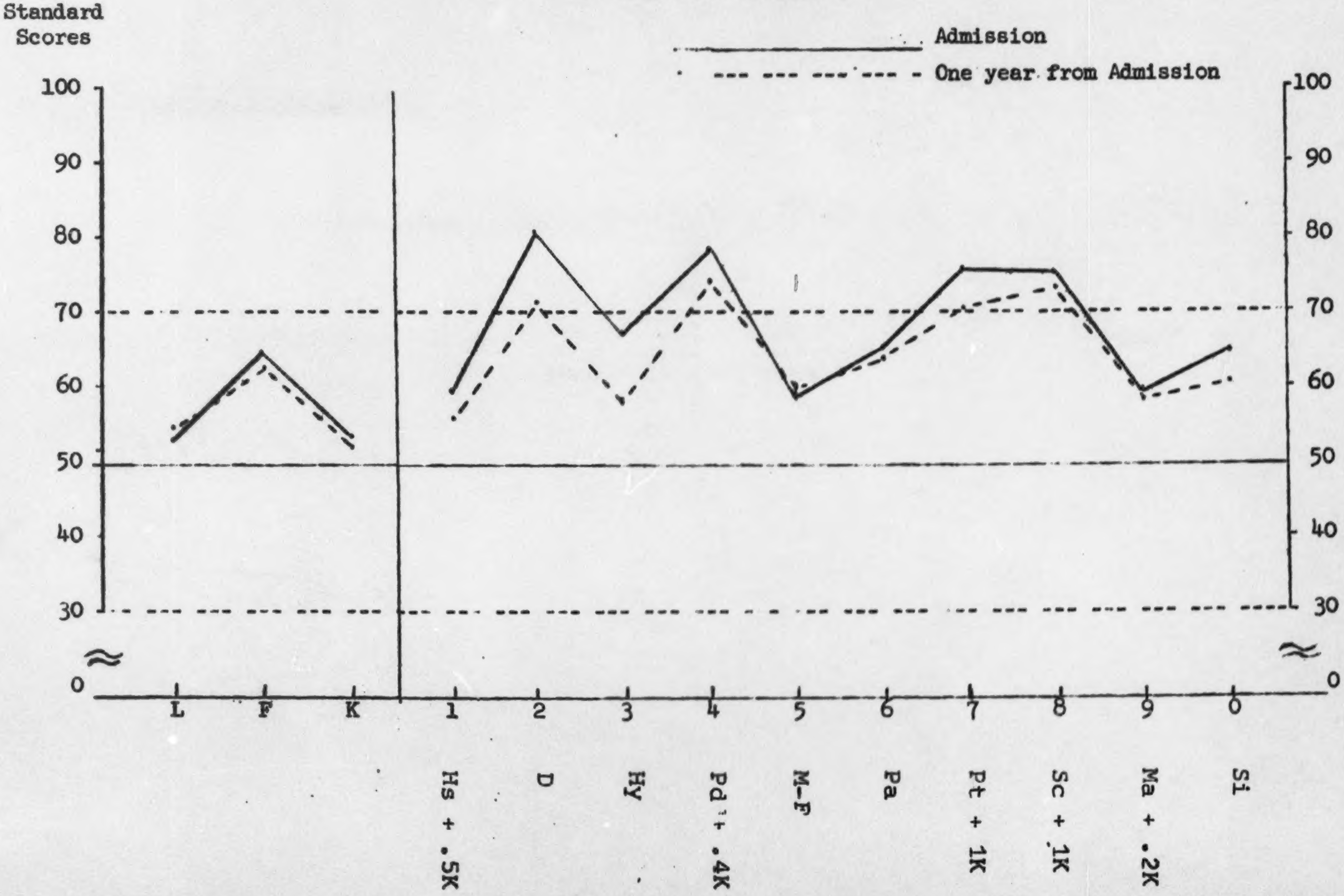
COMPARISON OF MMPI DERIVED SCALES FROM DISCHARGE TO ONE YEAR FROM ADMISSION FOR CCH GROUP

	Discharge N=26		One Year N=26		
Variables	Mean	S.D.	Mean	S.D.	t
Hostility	20.27	8.36	19.85	8.99	.35
Inner Maladjustment	54.35	22.62	56.15	25.35	- .40
Neurotic Overcontrol	8.35	3.35	8.00	3.39	.76
Need for Treatment	21.23	6.90	21.23	5.83	-0.00
Neurotic Undercontrol	14.50	4.26	15.00	4.75	- .69
Prediction of Change	7.38	5.78	6.65	3.50	.72
Social Alienation	9.04	2.57	7.88	2.92	1.83*
Self-Alienation	8.04	3.59	6.88	3.22	1.37
Authority Problems	5.31	2.75	4.69	1.64	1.21

*Significant beyond .05 level, one-tailed test

Figure 6

Comparison of MMPI Scales for CCH Group on Admission and One Year from Admission



in pathology. Three significant changes out of 40 scales indicated chance findings.

Rorschach The results may be found in Table 28. Seven of the 24 variables were significant. They included: Critical W Responses (.01), A-Animal Responses (.01), Additional Responses (.05), Rotations (.05) and F+-Accuracy of Form Responses (.05); and V-Vista Responses (.05) and M or F Absent (.05) which did not.

Overall Test Results In each of the post-test comparisons there were 64 variables involved or 192 variables in the total three comparisons. Of the 192 variables, 47 significant differences resulted of which 30 were in the prodicted direction. These results are significant beyond chance and supported the hypothesis that there would be a significant reduction in pathology, comparing the admission tests to the post-tests and discharge tests to one year from admission tests for CCH group.

A summary of the 47 significant differences that occurred in the post-test comparisons may be found in Table 29. Nine of the 20 significant differences that emerged in the admission to discharge test comparison were in the prodicted direction. From admission to one year from admission 12 of the significant differences were as predicted. The comparison from discharge to one year from admission revealed that nine of the 11 significant differences were in the predicted direction. These results indicated that with the passing of time there was a steady

TABLE 28

COMPARISON OF RORSCHACH RESULTS FROM DISCHARGE TO ONE YEAR FROM ADMISSION FOR CCH GROUP

	Discharge N=29		One Year N=29		
Variables (Raw Score)	Mean	S.D.	Mean	S.D.	t
(R) Responses	19.62	8.10	19.52	8.63	.07
Categories	18.57	18.24	15.25	15.72	.85
Additional Responses	.63	1.06	4.13	4.97	-1.85*
Rotations	2.93	3.45	7.50	8.83	-1.82*
Variables (Percentages)					
(W) Whole Responses	32.97	22.31	36.03	22.14	- .69
(D) Detail Responses	57.11	24.28	59.07	18.63	- .53
(Dd) Fine Detail Responses	7.06	7.34	9.94	6.74	-1.18
(P) Popular Responses	24.79	13.04	25.28	12.04	- .19

*Significant beyond .05 level, one-tailed test

TABLE 28 (Continued)

COMPARISON OF RORSCHACH RESULTS FROM DISCHARGE TO ONE YEAR FROM ADMISSION FOR CCH GROUP

	Discharge N=29		One Year N=29		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t
(F) Form Responses	47.27	15.96	43.55	18.68	1.32
(F+) Accuracy of Form Responses	91.67	10.69	94.46	5.81	-2.39*
(M) Human Movement Responses	22.96	16.09	23.40	14.31	- .17
(FM) Animal Movement Responses	22.19	9.51	24.85	13.49	- .83
(Fm) Inanimate Movement Responses	5.33	5.03	5.00	1.00	.12
(A) Animal Responses	32.28	21.70	42.56	16.19	-2.67**
(C) Color Responses	22.11	11.85	21.11	9.89	.46
(Y) Shading Responses	14.85	8.26	16.92	11.97	- .93

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 28 (Continued)

COMPARISON OF RORSCHACH RESULTS FROM DISCHARGE TO ONE YEAR FROM ADMISSION FOR CCH GROUP

Variables (Percentages)	Discharge N=29 Mean	Discharge N=29 S.D.	One Year N=29 Mean	One Year N=29 S.D.	t
(T) Texture Responses	6.88	8.70	8.65	5.01	- .90
(V) Vista Responses	3.71	3.77	7.14	3.63	-2.12*
(S) Figure Ground Reversals	4.75	4.71	10.08	11.77	-1.34
M or F Absent	3.56	5.79	8.00	3.32	-1.78*
Rejections	10.40	9.74	14.20	13.39	- .76
Blends	7.21	6.38	8.71	4.89	- .93
Critical W Responses	2.75	4.30	8.88	6.33	-2.62**
Responses on Cards VIII,IX,X	30.97	10.35	33.24	7.87	-1.32

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 29

SUMMARY OF SIGNIFICANT DIFFERENCES FOR POST TEST
COMPARISON FOR CCH GROUP

	Admission to Discharge			Admission to One Year		
	Predicted	Not Predicted	Total Significant Differences	Predicted	Not Predicted	Total Significant Differences
MMPI	3	1	4	3	0	3
MMPI Derived Scales	0	7	7	4	1	5
Rorschach	6	3	9	5	3	8
TOTAL	9(45%)	11(55%)	20	12(75%)	4(25%)	16

	Discharge to One Year		
	Predicted	Not Predicted	Total Significant Differences
MMPI	1	0	1
MMPI Derived Scales	2	0	2
Rorschach	6	2	8
TOTAL	9(82%)	2(18%)	11

GRAND TOTAL: 30 of 47 (64%)
in the predicted direction

increase in the percentage of significant differences in the predicted direction further supporting the hypothesis.

4. Investigation IV

Hypothesis 7 - The results may be found in Table 30. There were no significant differences in the percentage of patients employed between the ASH and CCH groups at admission, supporting the hypothesis.

Hypothesis 8 - The results may be found in Table 31. Employment at discharge showed a significant difference between the ASH and CCH group in the predicted direction, supporting the hypothesis that a significantly higher number of CCH patients would be employed at discharge as compared to ASH patients.

Hypothesis 9 - The monthly salary rates of employed CCH patients may be found in Table 32. A statistical comparison of income between ASH and CCH groups was impossible due to the fact that in terms of available data none of the ASH patients were employed upon discharge. The differences between these two groups were obviously significant, supporting the hypothesis that CCH patients would achieve higher income at discharge than ASH patients.

Hypothesis 10 - The results may be found in Table 32. These results were further condensed and may be found in Table 33. Approximately one-half (49%) of the employed patients earned less than $300 upon admission. Although the results were just about the same upon discharge (46%), only 27% or about one-fourth of the patients were

TABLE 30

EMPLOYMENT AT ADMISSION

	Female		Male		Total *	
	%	N	%	N	%	N
ASH						
Unemployed	100	12	.81	21	.87	33
Employed	.00	0	.19	5	.13	5
CCH						
Unemployed	.88	21	.78	30	.82	51
Employed	.13	3	.22	8	.18	11

*Chi-square - n.s.

TABLE 31

EMPLOYMENT AT DISCHARGE

	Female		Male		Total *	
	%	N	%	N	%	N
ASH						
Unemployed	100	4	100	13	100	17
Employed	.00	0	.00	0	.00	0
CCH						
Unemployed	.79	19	.39	15	.55	34
Employed	.21	5	.61	23	.45	28

*Chi-square - 10.01, significant beyond .01 level

TABLE 32

MONTHLY SALARY RATES FOR EMPLOYED CCH PATIENTS*

	FEMALE	MALE	TOTAL
	N=15	N=32	N=47
Admission			
$ 0.00 - $130.00	.07	.13	.11
131.00 - 215.00	.40	.06	.17
216.00 - 300.00	.13	.25	.21
301.00 - 390.00	.20	.09	.13
391.00 - 475.00	.13	.13	.13
476.00 - 560.00	.00	.09	.06
561.00 - 645.00	.07	.00	.02
646.00 - 730.00	.00	.09	.06
731.00 - 820.00	.00	.00	.00
821.00 - or over		.16	.11
Discharge	N=7	N=26	N=33
$ 0.00 - 130.00	.00	.00	.00
131.00 - 215.00	.42	.19	.25
216.00 - 300.00	.29	.19	.21
301.00 - 390.00	.29	.08	.12
391.00 - 475.00	.00	.23	.18
476.00 - 560.00	.00	.12	.09
561.00 - 645.00	.00	.00	.00
646.00 - 730.00	.00	.04	.03
731.00 - 820.00	.00	.00	.00
821.00 - or over	.00	.00	.00
Post (One Year from Admission)	N=9	N=29	N=38
$ 0.00 - 130.00	.11	.00	.03
131.00 - 215.00	.11	.10	.11
216.00 - 300.00	.11	.14	.13
301.00 - 390.00	.45	.14	.20
391.00 - 475.00	.00	.14	.11
476.00 - 560.00	.11	.28	.23
561.00 - 645.00	.11	.00	.03
646.00 - 730.00	.00	.07	.05
731.00 - 820.00	.00	.03	.03
821.00 - or over	.00	.10	.08

*Results presented in percentages

TABLE 33

MONTHLY SALARY RATES FOR EMPLOYED CCH PATIENTS*

	Admission N=47	Discharge N=33	One Year N=28
$ 0.00 - $300.00	.49	.46	.27
301.00 - 560.00	.32	.39	.54
561.00 - or over	.19	.15	.19

*Results presented in percentages

making less than $300 one year from admission to CCH. Approximately one-third (32%) of the employed patients were earning between $301 to $560 upon entrance. Although the results were similar upon discharge (39%), one year from discharge the percentage of patients in the high income bracket ($561 or over) remained stable throughout the period. These results support the hypothesis that CCH treatment would not effect a reduction in income following treatment as compared to income at admission.

5. Investigation V

Hypothesis 11 - The results may be found in Tables 34, 35 and 36. Comparisons of attitudes toward treatment, the installation and mental illness were made between the ASH and CCH groups at admission, discharge, and one year from admission.

Significant differences occurred at admission. Two of the three variables were significant and in the predicted direction. CCH patients felt significantly more positive toward treatment (.01) and had significantly less self-identification with mental illness (.05) than did the ASH group. These results supported the hypothesis as it applies to admission. No significant differences occurred at discharge or one year from admission, not supporting these aspects of the hypothesis.

Overall Test Results In each of the post tests there were three variables, or nine variables in the total comparison. Of the nine variables two

TABLE 34

COMPARISON OF SEMANTIC DIFFERENTIAL TEST FOR ATTITUDES TOWARD TREATMENT, THE INSTALLATION AND MENTAL ILLNESS BETWEEN ASH AND CCH GROUPS UPON ADMISSION

	ASH N=36		CCH N=62		
Variable	Mean	S.D.	Mean	S.D.	t
Treatment	2.93	1.33	2.01	1.04	3.58**
Installation	4.51	1.64	4.55	1.53	- .12
Identification with Mental Illness	.96	.84	1.28	.95	-1.74*

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 35

COMPARISON OF THE SEMANTIC DIFFERENTIAL TEST FOR ATTITUDES TOWARD TREATMENT, THE INSTALLATION AND MENTAL ILLNESS BETWEEN ASH AND CCH GROUPS UPON DISCHARGE

	ASH N=18		CCH N=49		
Variable	Mean	S.D.	Mean	S.D.	t*
Treatment	2.81	1.42	2.26	1.12	1.45
Installation	4.25	1.35	4.30	1.79	- .11
Identification with Mental Illness	1.17	1.33	.95	.89	.64

*One-tailed test

TABLE 36

COMPARISON OF THE SEMANTIC DIFFERENTIAL TEST FOR ATTITUDES TOWARD TREATMENT, THE INSTALLATION AND MENTAL ILLNESS BETWEEN ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=12		CCH N=30		
Variable	Mean	S.D.	Mean	S.D.	t*
Treatment	3.05	1.15	2.69	1.64	.77
Installation	4.89	1.04	4.87	1.66	.04
Identification with Mental Illness	.98	1.11	1.09	.99	- .31

*One-tailed test

significant differences were found, both of which were in support of the hypothesis as it applies to admission. These results support the hypothesis that the CCH group would show a more positive attitude toward treatment and would evidence significantly less identification with mental illness at admission. The hypothesis was not supported for discharge and one year from admission.

Hypothesis 12 - Three different comparisons were made within the CCH group. These included: first to second testing (admission to discharge), first to third testing (admission to one year from admission), and second to third testing (discharge to one year from admission). The results of these comparisons are as follows.

First vs. Second Testing (Admission vs. Discharge)

The results may be found in Table 37. Two significant differences were found. CCH patients felt significantly more positive toward the installation upon discharge supporting the hypothesis. CCH patients felt significantly more negative toward treatment at discharge, however, which was not in support of the hypothesis.

First vs. Third Testing (Admission vs. One Year From Admission)

The results may be found in Table 38. One significant difference was found. CCH patients felt significantly more negative toward treatment one year after admission which was not in support of the hypothesis.

TABLE 37

COMPARISON OF THE SEMANTIC DIFFERENTIAL TEST FOR ATTITUDES TOWARD TREATMENT, THE INSTALLATION AND MENTAL ILLNESS FROM ADMISSION TO DISCHARGE IN THE CCH GROUP

	Admission N=46		Discharge N=46		
Variable	Mean	S.D.	Mean	S.D.	t
Treatment	1.87	1.01	2.26	1.14	2.01*
Installation	4.76	1.50	4.38	1.73	-1.81*
Identification with Mental Illness	1.33	.95	1.32	.79	0.00

*Significant beyond .05 level, one-tailed test

TABLE 38

COMPARISON OF THE SEMANTIC DIFFERENTIAL TEST FOR ATTITUDE TOWARD TREATMENT, THE INSTALLATION AND MENTAL ILLNESS FROM ADMISSION TO ONE YEAR FROM ADMISSION IN THE CCH GROUP

	Admission N=28		One Year N=28		
Variable	Mean	S.D.	Mean	S.D.	t
Treatment	2.06	1.11	2.78	1.62	2.20*
Installation	4.64	1.61	4.87	1.69	.55
Identification with Mental Illness	1.31	1.03	1.45	.90	.41

*Significant beyond .05 level, one-tailed test

Second vs. Third Testing (Discharge vs. One Year From Admission)

The results may be found in Table 39. Two significant differences were found. CCH patients demonstrated significantly more negative attitudes toward treatment and the installation one year from admission which was not in support of the hypothesis.

Overall Test Results In each of the post tests there were three variables or nine variables in the total comparisons. Of the nine variables, five significant differences were found of which four were in the direction opposite to the prediction. These results do not support the hypothesis that upon completion of treatment, the CCH group would show a significantly more positive attitude toward treatment, the installation and would evidence less identification with mental illness than was evidenced upon admission.

Investigation VI

Hypothesis 13 - The results may be found in Tables 40, 41 and 42. Comparisons of attitudes toward themselves, others, and the community were made between the ASH and CCH groups at admission, discharge, and one year from admission. ASH patients felt significantly more positive toward their fathers. These results did not support the hypothesis as it applies to admission. No significant difference occurred at discharge or one year from admission, not supporting these aspects of the hypothesis.

TABLE 39

COMPARISON OF THE SEMANTIC DIFFERENTIAL TEST FOR ATTITUDE TOWARD TREATMENT, THE INSTALLATION AND MENTAL ILLNESS FROM DISCHARGE TO ONE YEAR FROM ADMISSION IN THE CCH GROUP

	Discharge N=26		One Year N=26		
Variable	Mean	S.D.	Mean	S.D.	t
Treatment	1.90	.98	2.64	1.45	2.81**
Installation	3.95	1.89	4.73	1.68	1.70*
Identification with Mental Illness	1.06	.97	1.44	.94	1.49

*Significant beyond .05 level, one-tailed test

**Significant beyond .01 level, one-tailed test

TABLE 40

COMPARISONS OF ATTITUDES TOWARD THEMSELVES, OTHERS AND THE COMMUNITY BETWEEN ASH AND CCH GROUPS AT ADMISSION

	ASH N=36		CCH N=62		
Variable	Mean	S.D.	Mean	S.D.	t
Me As I Really Am	2.71	1.07	3.03	1.05	-1.44
Mother	2.36	1.31	2.61	1.42	- .88
Father	2.41	1.53	3.07	1.72	-1.96*
Mate	1.61	.81	1.59	.82	.11
Community	3.28	1.48	3.20	1.20	.27

*Significant beyond .05 level, one-tailed test

TABLE 41

COMPARISON OF ATTITUDES TOWARD THEMSELVES, OTHERS AND THE COMMUNITY BETWEEN ASH AND CCH GROUPS AT DISCHARGE

	ASH N=18		CCH N=49		
Variable	Mean	S.D.	Mean	S.D.	t*
Me As I Really Am	3.18	1.32	2.62	1.08	1.57
Mother	2.65	1.07	2.31	1.06	1.13
Father	2.83	1.42	2.57	1.56	.64
Mate	1.79	.99	1.70	.89	.35
Community	3.15	1.15	2.94	1.20	.62

*One-tailed test

TABLE 42

COMPARISON OF ATTITUDES TOWARD THEMSELVES, OTHERS AND THE COMMUNITY BETWEEN ASH AND CCH GROUPS ONE YEAR FROM ADMISSION

	ASH N=12		CCH N=30		
Variable	Mean	S.D.	Mean	S.D.	t*
Me As I Really Am	2.89	.97	2.88	1.47	.02
Mother	2.80	.96	2.78	1.62	.04
Father	2.88	1.80	2.91	1.71	- .04
Mate	1.88	.87	2.01	1.15	- .37
Community	3.20	1.11	3.23	1.44	- .07

*One-tailed test

Overall Test Results In each of the comparisons there were five variables or a total of 15 variables in all. Of the 15 variables, one significant difference was found and it was not in support of the hypothesis. These results were chance findings and did not support the hypothesis that the CCH group would show a more positive attitude toward themselves, others and the community than would the ASH group at admission, discharge and one year from admission.

Hypothesis 14 - These results may be found on Tables 43, 44 and 45. Three different comparisons were made within the CCH group. They included: first to second testing (admission to discharge), first to third testing (admission to one year from admission) and second to third testing (discharge to one year from admission). There were five variables in each of the comparisons or a total of 15 variables in all. Although one significant difference was found in the predicted direction, this could be expected by chance. The hypothesis that upon completion of treatment CCH group would show more positive attitudes toward themselves, others and the community than was evidenced at admission was not supported.

7. Investigation VII

Selection Criteria for Successful and Unsuccessful CCH Groups

CCH patients were divided into successful and unsuccessful groups by the clinician working at CCH. He

TABLE 43

COMPARISON OF ATTITUDES TOWARD THEMSELVES, OTHERS AND THE COMMUNITY FROM ADMISSION TO DISCHARGE IN THE CCH GROUP

	Admission N=46		Discharge N=46		
Variable	Mean	S.D.	Mean	S.D.	t
Me As I Really Am	2.94	1.01	2.62	1.10	-1.70*
Mother	2.36	1.31	2.35	1.02	- .02
Father	3.05	1.73	2.77	1.43	-1.27
Mate	1.49	.76	1.72	.88	1.55
Community	3.09	1.18	2.91	1.21	-1.09

*Significant beyond .05 level, one-tailed test

TABLE 44

COMPARISONS OF ATTITUDES TOWARD THEMSELVES, OTHERS AND THE COMMUNITY FROM ADMISSION TO ONE YEAR FROM ADMISSION IN THE CCH GROUP

	Admission N=28		One Year N=28		
Variables	Mean	S.D.	Mean	S.D.	t*
Me As I Really Am	2.91	1.12	2.86	1.49	- .19
Mother	2.55	1.54	2.83	1.56	1.15
Father	3.36	1.74	3.00	1.67	-1.42
Mate	1.62	.89	1.95	1.13	1.67
Community	3.23	1.47	3.18	1.44	- .17

*One-tailed test

TABLE 45

COMPARISONS OF ATTITUDES TOWARD THEMSELVES, OTHERS AND THE COMMUNITY DISCHARGE TO ONE YEAR FROM ADMISSION IN THE CCH GROUP

	Discharge N=26		One Year N=26		
Variable	Mean	S.D.	Mean	S.D.	t*
Me As I Really Am	2.59	1.11	2.67	1.32	.35
Mother	2.34	1.09	2.68	1.59	1.07
Father	2.94	1.70	2.86	1.66	- .17
Mate	1.70	.89	1.86	1.06	1.21
Community	2.78	1.33	3.14	1.52	1.14

*One-tailed test

was asked to rate all of the patients based on the success of their treatment using the selection criteria in Table 46. The top rated 20 patients were assigned to the successful group and the lower rated 20 were assigned to the unsuccessful group. The clinician did not have knowledge of the research test results of the CCH patients, and the assignments were based solely on his judgment of treatment success.

Hypothesis 15 - The results may be found in Table 47. There were no significant differences between the two groups on either of the two variables. These results did not support the hypothesis that successfully treated patients at CCH would have a significantly more positive attitude toward treatment and the installation at admission than would unsuccessfully treated patients.

Exploratory Comparisons:

Exploratory Comparison (a) A comparison between successful and unsuccessful patients at CCH was made on all of the psychological tests including the MMPI (Table 48 and Figure 7), MMPI Derived Scales (Table 49 and Figure 8), Rorschach (Table 50), and the Evaluative (Table 51), Activity (Table 52) and Potency (Table 53) Factors of the Semantic Differential. There were 121 variables in all, and of these four significant differences occurred. The results indicate that at admission these tests were not able to differentiate between successfully or unsuccessfully treated patients at CCH.

TABLE 46

SELECTION CRITERIA FOR SUCCESSFUL-UNSUCCESSFUL CCH GROUPS

SUCCESSFUL	UNSUCCESSFUL
Not hospitalized following CCH treatment	Hospitalized following CCH treatment
No involvement with legal authorities	Involvement with legal authorities
Functioned vocationally	Failed training or lost jobs
Used CCH treatment well	Did not use CCH treatment appropriately
Less (or not) suicidal	Remained (or became) suicidal
Internalized socially acceptable values	Did not internalize socially acceptable values
No crises following treatment	Crises following treatment
Independent	Dependent
Sociable	Withdrawn or isolated
No abuse of medications, alcohol, drugs	Abuse of medications, alcohol, drugs

TABLE 47

COMPARISON OF ATTITUDES TOWARD THE INSTALLATION AND TREATMENT BETWEEN SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	**Mean**	**S.D.**	**Mean**	**S.D.**	**t***
Installation	4.67	1.46	4.73	1.75	- .11
Treatment	2.26	1.14	1.87	1.06	1.10

*One-tailed test

TABLE 48

COMPARISON OF MMPI SCALES FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t*
L-Lie	54.35	7.10	53.21	5.49	.55
F-Validity	63.30	8.99	67.63	9.34	-1.44
K-Correction	55.20	9.24	50.11	9.84	1.62
Hypochondriasis	65.90	8.91	61.05	12.34	1.36
Depression	84.70	16.72	76.63	19.16	1.36
Hysteria	72.00	8.72	66.16	13.17	1.58
Psychopathic Deviate	80.70	9.21	79.58	12.58	.31
Masculinity-Femininity	54.70	14.29	62.47	17.90	-1.46
Paranoia	67.70	7.53	69.42	11.88	- .52

*Two-tailed test

TABLE 48 (Continued)

COMPARISON OF MMPI SCALES FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t
Psychasthenia	78.35	16.65	73.90	13.68	.89
Schizophrenia	76.50	20.54	80.11	19.37	- .55
Hypomania	56.90	7.99	65.84	10.17	-2.96 **
Social Introversion	62.95	14.04	62.21	19.23	.13

**Significant beyond .01 level, two-tailed test

Figure 7

Comparison of MMPI Scales for CCH Group on Discharge
and One Year From Discharge

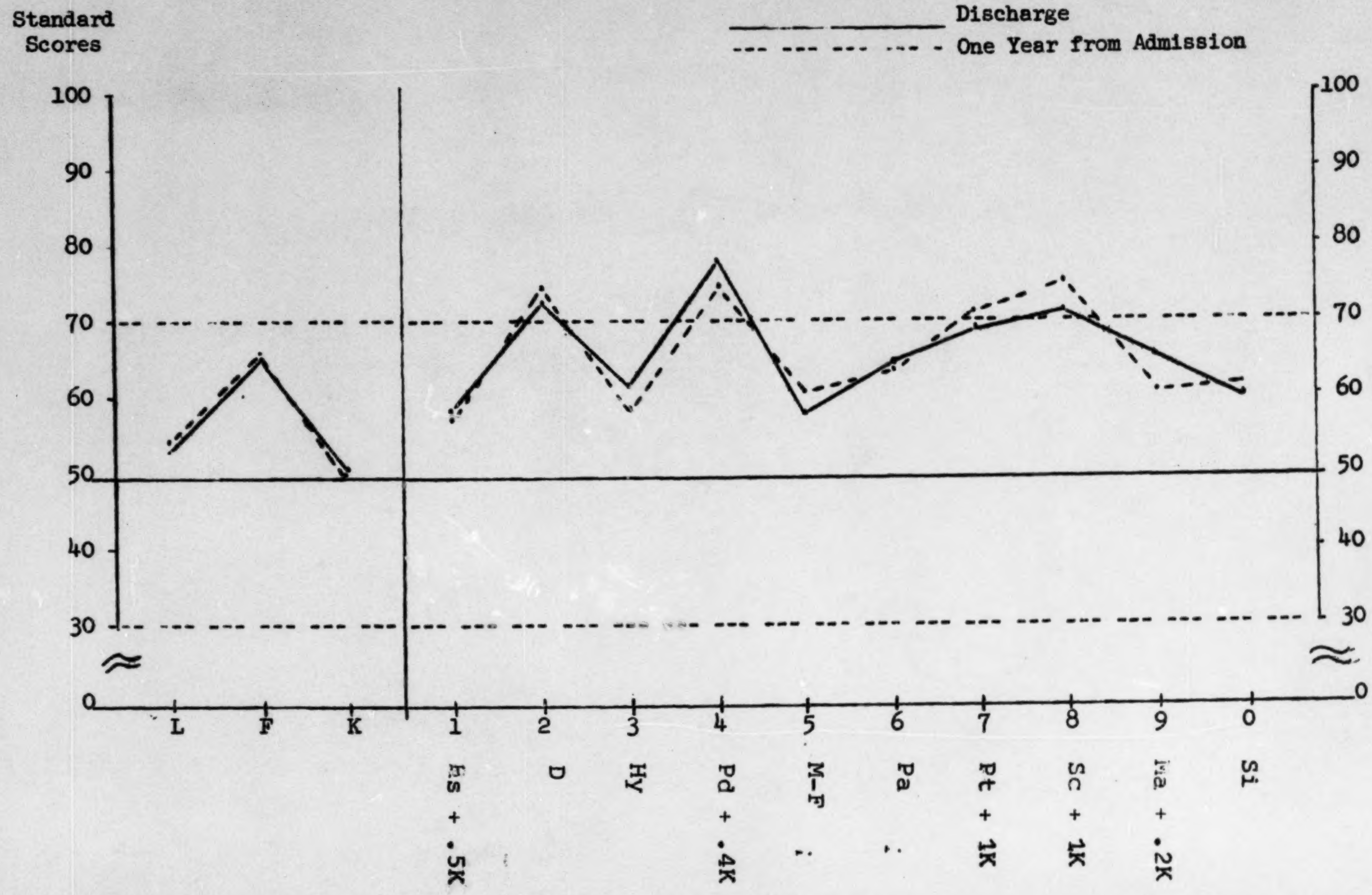


TABLE 49

COMPARISON OF MMPI DERIVED SCALES FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t
Ego Strength	35.70	11.18	38.06	6.13	- .79
Anxiety Reaction	24.60	5.71	24.83	4.84	- .13
Control	26,40	7.91	29.61	6.24	-1.36
Evaluation of Improvement	33.05	15.01	36.22	13.14	- .68
General Maladjustment	14.35	6.19	16.28	6.34	- .92
Impulsivity	7.60	3.79	10.61	4.64	-2.12*
Length of Hospitalization	15.50	5.04	14.72	2.76	.58
Neuroticism	12.05	5.84	12.17	5.71	- .06
Familial Discord	4.40	2.30	5.56	2.75	-1.36

*Significant beyond .05 level, two-tailed test

TABLE 49 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t*
Self-Sufficiency	12.85	8.09	13.28	7.29	- .17
Somatization Reaction	18.65	7.20	17.39	6.45	.55
Tolerance	16.75	6.66	15.44	6.07	.62
Attitude toward Others	12.55	5.12	10.61	4.06	1.26
Attitude toward Self	8.60	4.69	7.94	3.15	.50
Dependency	31.90	12.92	31.94	8.61	- .01
Escapism	16.80	5.51	19.83	5.07	-1.72
Emotional Immaturity	24.05	10.96	26.33	10.90	- .63
Hostility Control	12.50	8.64	13.44	4.71	- .41

*Two-tailed test

TABLE 49 (Continued)

COMPARISON OF MMPI DERIVED SCALES FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t*
Hostility	17.45	8.06	22.50	9.82	-1.67
Inner Maladjustment	59.65	28.37	71.83	24.28	-1.39
Neurotic Overcontrol	8.60	4.15	7.78	3.04	.68
Need for Treatment	22.55	7.71	25.00	5.59	-1.10
Neurotic Undercontrol	14.45	5.38	18.00	5.43	-1.97
Prediction of Change	9.75	5.84	9.89	4.82	- .08
Social Alienation	8.30	3.36	8.78	2.71	- .47
Self-Alienation	10.50	10.11	8.89	2.78	.67
Authority Problems	5.80	4.16	4.78	1.66	.99

*Two-tailed test

Figure 8

Comparison of MMPI Scales for Successful and Unsuccessful CCH Patients

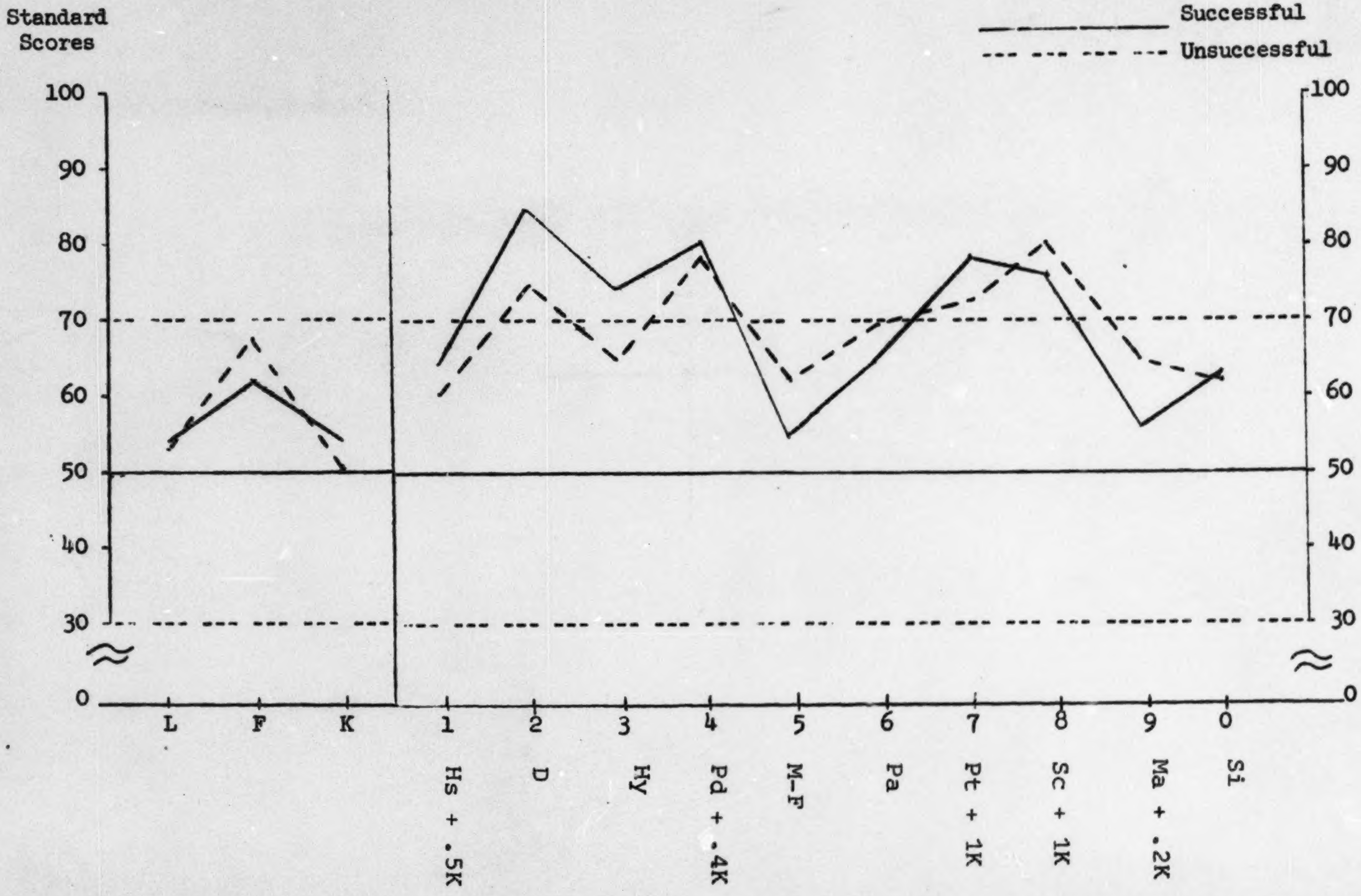


TABLE 50

COMPARISON OF THE RORSCHACH RESULTS FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables (Raw Score)	Mean	S.D.	Mean	S.D.	t*
(R) Responses	19.35	9.47	22.80	17.27	- .76
Categories	12.35	15.12	13.00	13.52	- .14
Additional Responses	.60	1.10	.45	1.00	.44
Rotations	1.55	2.54	2.15	3.50	- .60
Variables (Percentages)					
(W) Whole Responses	40,40	22.99	38.05	26.16	.29
(D) Detail Responses	51.30	21.13	48.05	25.29	.43
(Dd) Fine Detail Responses	6.95	9.11	8.60	10.65	- .51
(P) Popular Responses	26.60	10.25	22.35	11.14	1.22

*Two-tailed test

TABLE 50 (Continued)

COMPARISON OF THE RORSCHACH RESULTS FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables (Percentages)	Mean	S.D.	Mean	S.D.	t*
(F) Form Responses	45.55	21.78	46.10	24.85	- .07
(F+) Accuracy of Form Responses	92.35	11.28	91.80	8.71	.17
(M) Human Movement Responses	19.60	13.77	21.55	14.51	- .42
(FM) Animal Movement Responses	20.35	14.90	27.40	12.67	-1.57
(Fm) Inanimate Movement Responses	.20	.89	1.90	4.53	-1.61
(A) Animal Responses	34.70	18.42	35.70	20.34	- .16
(C) Color Responses	21.40	13.91	20.00	16.90	.28
(Y) Shading Responses	11.40	12.29	12.80	9.66	- .39

*Two-tailed test

TABLE 50 (Continued)

COMPARISON OF THE RORSCHACH RESULTS FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

Variables (Percentages)	Successful N=20 Mean	Successful N=20 S.D.	Unsuccessful N=20 Mean	Unsuccessful N=20 S.D.	t*
(T) Texture Responses	3.55	4.91	5.80	7.64	-1.08
(V) Vista Responses	1.90	4.92	1.70	3.47	.14
(S) Figure Ground Reversals	3.30	4.18	2.80	3.76	.39
M or F Absent	2.55	4.78	1.70	5.16	.53
Rejections	1.95	4.33	1.00	3.09	.78
Blends	2.40	4.89	4.90	7.24	-1.25
Critical W Responses	2.65	4.33	1.65	4.74	.68
Responses on Cards VIII,IX,X	33.20	7.81	38.40	8.63	-1.95

*Two-tailed test

TABLE 51

COMPARISON OF THE SEMANTIC DIFFERENTIAL EVALUATIVE FACTOR FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t*
Me As I Really Am	2.94	1.02	3.35	1.04	-1.19
Mother	2.52	1.41	2.63	1.63	- .23
Father	3.28	1.69	3.01	1.70	.49
Institution	4.67	1.46	4.73	1.75	- .11
Mate	1.85	1.00	1.42	.70	1.51
Me As Others See Me	2.25	1.02	3.01	1.98	-1.46
Mental Illness	2.43	1.11	2.14	1.29	.75
Me As I Would Like To Be	1.57	1.43	1.60	2.22	- .04
Community	3.17	1.40	3.13	1.27	.10
Treatment	2.25	1.14	1.87	1.06	1.10

*Two-tailed test

TABLE 51 (Continued)

COMPARISON OF THE SEMANTIC DIFFERENTIAL EVALUATIVE FACTOR FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t
d-Mother	1.10	1.10	1.27	1.18	- .45
d-Father	1.57	1.29	1.44	1.12	.34
d-Institution	1.97	1.45	2.11	1.31	- .30
d-Mate	1.21	1.05	1.94	.98	-2.17*
d-Me As Others See Me	1.25	1.27	1.52	1.05	- .70
d-Mental Illness	1.23	1.02	1.48	1.04	- .72
d-Me As I Would Like to Be	.71	.90	1.22	1.24	-1.44
d-Community	1.02	1.08	1.41	1.07	-1.12
d-Treatment	1.22	.90	1.51	.97	- .96

*Significant beyond .05 level, two-tailed test

TABLE 52

COMPARISON OF THE SEMANTIC DIFFERENTIAL ACTIVITY FACTOR FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t*
Me As I Really Am	3.83	1.45	3.92	1.37	- .18
Mother	3.79	1.32	3.32	1.47	1.05
Father	3.83	1.52	3.12	1.65	1.37
Institution	4.17	1.23	4.61	1.10	-1.12
Mate	2.20	.92	2.24	1.00	- .11
Me As Others See Me	3.47	1.19	3.43	1.73	.08
Mental Illness	3.72	.87	3.56	1.23	.45
Me As I Would Like To Be	2.35	1.78	2.12	2.05	.37
Community	3.57	1.91	3.80	1.38	- .41
Treatment	3.38	1.05	3.01	1.44	.92

*Two-Tailed Test

TABLE 52 (Continued)

COMPARISON OF THE SEMANTIC DIFFERENTIAL ACTIVITY FACTOR FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

Variables	Successful N=20 Mean	Successful N=20 S.D.	Unsuccessful N=20 Mean	Unsuccessful N=20 S.D.	t
d-Mother	1.83	1.00	1.14	1.00	2.10*
d-Father	1.56	1.12	1.61	1.06	- .13
d-Institution	1.48	1.05	1.45	1.45	.07
d-Mate	1.77	1.35	1.85	1.46	- .18
d-Me As Others See Me	1.59	1.31	1.63	1.28	- .08
d-Mental Illness	1.36	1.12	1.64	1.27	- .70
d-Me As I Would Like To Be	1.11	1.26	.96	1.11	.40
d-Community	.74	.98	.45	.40	1.18
d-Treatment	1.67	1.13	1.41	1.06	.71

*Significant beyond .05 level, two-tailed test

TABLE 53

COMPARISON OF THE SEMANTIC DIFFERENTIAL POTENCY FACTOR FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t*
Me As I Really Am	3.95	1.32	3.67	1.27	.67
Mother	3.81	1.39	3.57	1.56	.28
Father	3.84	1.23	3.89	1.81	.89
Institution	3.26	1.60	2.65	1.64	1.15
Mate	2.98	.80	2.34	1.18	1.97
Me As Others See Me	3.57	1.21	3.24	1.23	.83
Mental Illness	3.27	1.04	3.20	1.35	.20
Me As I Would Like To Be	2.26	1.92	2.04	2.08	.34
Community	3.75	1.76	3.75	1.01	- .01
Treatment	2.79	.98	2.67	1.50	.30

*Two-tailed test

TABLE 53 (Continued)

COMPARISON OF THE SEMANTIC DIFFERENTIAL POTENCY FACTOR FOR SUCCESSFUL AND UNSUCCESSFUL PATIENTS AT CCH

	Successful N=20		Unsuccessful N=20		
Variables	Mean	S.D.	Mean	S.D.	t*
d-Mother	1.53	1.37	.85	.91	1.76
d-Father	1.64	1.09	1.39	.93	.72
d-Institution	1.54	1.37	2.25	1.24	-1.65
d-Mate	1.38	1.26	1.43	1.08	- .13
d-Me As Others See Me	1.37	1.33	1.23	1.01	.37
d-Mental Illness	1.41	1.09	1.29	1.31	.30
d-Me As I Would Like To Be	1.44	1.65	.80	1.00	1.42
d-Community	.59	.80	.76	.48	- .76
d-Treatment	1.61	1.60	1.43	1.54	.35

*Two-tailed test

Exploratory Comparison (b) The results of this investigation are presented in two tables due to the nature of the data. Some of the data was categorized and the chi-square statistic was used. These results may be found in Table 54. The data by which means and standard deviation scores were computed may be found in Table 55.

Chi-Square Analyses One of the twelve variables showed a significant difference indicating that successful patients at CCH had jobs prior to admission that were semi-skilled, skilled or professional. One significant difference of twelve variables is expected by chance.

t Test Analyses Four of the 12 variables showed significant differences. Successful patients at CCH were found to be older, had more months of previous hospitalization, had held more jobs and earned more money the year prior to admission than unsuccessful patients. These results are over and above what would be expected by chance.

Overall Demographic Results In each of the comparisons there were 12 variables or a total of 24 in all. Of the 24 variables, five significant differences were found, indicating that there were differences between successfully and unsuccessfully treated patients at CCH at admission. Results indicated that patients who

TABLE 54

CHI-SQUARE COMPARISON OF SUCCESSFUL AND UNSUCCESSFUL CCH PATIENTS ON DEMOGRAPHIC DATA

	Female		Male		Total		
Variable*	Successful N=10	Unsuccessful N=10	Successful N=10	Unsuccessful N=10	Successful N=20	Unsuccessful N=20	Chi-Square
Religion							
None	.10	.10	.00	.30	.05	.21	
Protestant	.50	.60	.80	.40	.65	.50	
Catholic	.30	.30	.20	.20	.25	.25	n.s.
Other	.10			.10	.05	.05	
Veteran							
Non-Veteran	1.00	1.00	.60	.50	.80	.75	
Veteran			.40	.50	.20	.25	
Marital Status							
Single	.40	.40	.30	.80	.35	.60	n.s.
Married	.20	.20	.20	.20	.20	.20	
Divorced**	.40	.40	.50		.45	.20	

*Percentile scores presented
**Includes: divorced, separated, widowed, divorced, remarried

TABLE 54 (Continued)

CHI-SQUARE COMPARISON OF SUCCESSFUL AND UNSUCCESSFUL CCH PATIENTS ON DEMOGRAPHIC DATA

	Female		Male		Total		
Variable*	Successful N=10	Unsuccessful N=10	Successful N=10	Unsuccessful N=10	Successful N=20	Unsuccessful N=20	Chi-square
Rank Among Siblings							
1st born	.33	.20	.30	.40	.32	.30	n.s.
Other	.67	.80	.70	.60	.68	.70	
Parents' Marital Status							
Married	.30	.20	.50	.40	.40	.30	n.s.
Divorced***	.70	.80	.50	.60	.60	.70	
Suicide							
None	.10	.10	.20	.50	.15	.30	n.s.
Threat	.90	.90	.80	.50	.85	.70	
Violence							
None	.70	.56	.40	.40	.55	.47	
Violence	.30	.44	.60	.60	.45	.53	n.s.
Arrests							
None	.70	.70	.40	.50	.55	.60	
Arrested	.30	.30	.60	.50	.45	.40	n.s.

*Percentile scores presented

***Includes: divorced, separated, widowed, divorced-remarried, adopted

TABLE 54 (Continued)

CHI-SQUARE COMPARISON OF SUCCESSFUL AND UNSUCCESSFUL CCH PATIENTS ON DEMOGRAPHIC DATA

	Female		Male		Total		
Variable*	Successful N=10	Unsuccessful N=10	Successful N=10	Unsuccessful N=10	Successful N=20	Unsuccessful N=20	Chi-square
Trouble with Law							
None	.60	.50	.50	.40	.55	.45	
Trouble with Law	.40	.50	.50	.60	.45	.55	n.s.
Employment at Admission							
Unemployed	.90	.90	.70	.80	.80	.85	
Employed	.10	.10	.30	.20	.20	.15	n.s.
Non-union-Union							
Non-union	.90	.10	.50	.90	.70	.95	
Union	.10	.00	.50	.10	.30	.05	n.s.
Type of Job							
Unskilled	.14	.71	.20	.67	.18	.69	6.84**
Semi-skilled, skilled or professional	.86	.29	.80	.33	.82	.31	

*Percentile scores presented

**Significant beyond .01 level

TABLE 55

t TEST COMPARISONS OF SUCCESSFUL AND UNSUCCESSFUL CCH PATIENTS ON DEMOGRAPHIC DATA

Variable*	Female		Male		Total		
	Successful N=10	Unsuccessful N=10	Successful N=10	Unsuccessful N=10	Successful N=20	Unsuccessful N=20	t
Age	28.10	24.40	33.20	26.10	30.65 8.00	25.25 8.70	2.05**
# of Siblings	2.50	2.80	3.60	2.50	3.05 3.12	2.65 2.57	n.s.
# of Patient's Children	1.60	1.70	1.10	.70	1.35 1.58	1.20 1.50	n.s.
Age at Family Break-up	9.83	7.00	10.50	9.50	10.50 4.97	8.25 5.43	n.s. n.s.
Age at First Treatment	22.70	20.20	27.70	21.90	25.20 7.22	21.05 8.89	n.s.
Age at First Commitment	24.70	22.50	28.00	24.30	26.35 6.71	23.40 8.73	n.s.

*Mean scores presented: standard deviation scores presented on second line for totals
**Significant beyond .05 level, two-tailed test

TABLE 55 (Continued)

t TEST COMPARISONS OF SUCCESSFUL AND UNSUCCESSFUL CCH PATIENTS ON DEMOGRAPHIC DATA

	Female		Male		Total		
Variable*	Successful N=10	Unsuccessful N=10	Successful N=10	Unsuccessful N=10	Successful N=20	Unsuccessful N=20	t
Years of Education	12.30	11.44	12.70	12.30	12.60 2.45	12.02 1.70	n.s.
# of Previous Hospitalizations	1.50	2.60	2.70	1.70	2.19 1.99	2.15 1.72	n.s.
Months Previous Hospitalization	10.10	8.90	20.60	6.00	15.35 19.67	7.45 11.70	5.05***
# of Jobs Mentioned	2.80	1.90	4.20	2.70	3.50 2.13	2.30 1.24	2.13**
Monthly Salary at Admission	$269.75	$269.75	$451.20	$290.75	$372.12 314.38	$281.12 232.85	n.s.
Earnings Prior Year	$930.50	$550.00	$1800.00	$980.00	$1425.00 1730.00	$775.00 712.80	2.04**

*Mean scores presented: standard deviation scores presented on second line for totals
**Significant beyond .05 level, two-tailed test
***Significant beyond .01 level, two-tailed test

were older, had more months of previous hospitalization, were more skilled vocationally, had higher earnings for the year prior to admission, and had held a greater number of jobs prior to admission were more apt to be successful at CCH.

IV. DISCUSSION

The research results accumulated in this study were very extensive. Since there were a great number of testings and re-testings over several years, a complete discussion of the findings including all of the variables and all of the possible comparisons would be prohibitive. As a result, the discussion is divided into three sections. The first section is devoted to the results of the individual investigations; the second section is concerned with coordinating the total findings of the study; the third section relates to implications resulting from these findings.

A. Individual Investigations

Investigation I

The basic aim of Investigation I was to answer the question of whether a residential treatment facility in the community could function as an effective alternative to hospitalization for acutely ill patients. The results indicated very clearly that selected acutely ill patients can be treated in a community setting very effectively. The low return rate indicated that such a facility should not only be considered as feasible but should be considered in many cases as the treatment of choice.

Investigation II

Two basic questions were asked in Investigation II. The first of these was whether the rehospitalization rate from the CCH facility would be lower in comparison to ASH. The results were favorable; however, they were not statistically significant. Thirty-seven percent of ASH patients were rehospitalized after treatment while 29% of CCH patients were rehospitalized. This indicated a definite trend in support of the hypothesis. One interesting aspect of the results was the apparent effectiveness of treatment for males at CCH as compared to females. Almost no difference in the rate of rehospitalization between ASH and CCH females occurred. A 12% difference was found between males, with the CCH males showing less rehospitalization.

The second aspect of the investigation was comparing length of treatment. The results indicated that the course of treatment took significantly less time at CCH. One of the contributing factors to this finding was the value of having patients deal directly and immediately with their problems while living in the community as opposed to being isolated from the community in a large institution. Another factor was the intense one-to-one relationships provided at CCH.

Investigation III

In this investigation there was an attempt to determine the effect upon pathology as a result of being in either of the two different treatment facilities. Although it was anticipated that there would be no differences upon entrance into treatment between the two groups, there were differences beyond chance. CCH patients manifested more pathology than the ASH group.

This finding may have to do with the environmental surroundings of the CCH installation. Whereas the hospital provided the security of locked doors, CCH was an open home in the community. It resembled a setting similar to that of the patient's home where he was unable to cope with the situational factors precipitating his illness. Patients needing the security of a "hospital surrounding" became more anxious at CCH as a result of the open setting and thus manifested more symptomology. A related explanation is that patients at CCH were more apt to demonstrate symptoms similar to those manifested in their own homes. They did not restrict their behavior as they might have done in a hospital where concealment of pathology would be a method of gaining discharge.

The findings regarding the comparison between ASH and CCH at discharge and one year from admission were not as predicted. Although differences were anticipated which would show less pathology in the CCH group, this was not found. Both groups showed a reduction in pathology as a result of treatment but no statistically significant differences between the two groups occurred. In one sense, these results favor the CCH group since there had been significantly more pathology manifested by the CCH group at admission. The CCH group attained the same level of pathology as the ASH group despite the initial differences.

The effect of the treatment upon the patients within the CCH group created a somewhat complex picture. From admission to discharge patients appeared to become more disturbed. This finding may be due to the fact that the CCH treatment placed patients in a situation where there was daily confrontation with their problems. On the MMPI for example, there was a significant drop in Hypochondriasis, Depression and Hysteria indicating that withdrawn, repressive defenses were no longer effective. At the same time there was a significant increase in Hypomania related to the focus of treatment. The Rorschach indicated that upon discharge from CCH, patients appeared more practical, more critical of their environment, had and made greater use of their potential and at the same time were more anxious and rebellious. This is interpreted as reflecting the fact that CCH patients demonstrated more realistic means of using potential resources in dealing with their illness. The MMPI Derived Scales seemed to reflect the resultant changes occurring when the withdrawn, repressive defenses were abandoned. There was, overall, more General Maladjustment, Neuroticism and Emotional Immaturity indicating a greater need for treatment.

What seems to emerge from these results was that upon discharge patients seemed to be undergoing changes indicated by a great deal of fluctuation in their pathology and their behavior. The disrupted defenses appeared to be changing from a passive nature to a more active one. These changes were in line with the treatment philosophy of CCH. Further evidence was found in the one year follow-up where the level of pathology dropped and stabilized in a much healthier way.

From admission to one year from admission, CCH patients appeared less depressed, less hysterical and less psychasthenic on the MMPI. On the MMPI Derived Scales they were less generally maladjusted and neurotic. On the Rorschach they were more critical, more accurate in their perception of the world, had more potential resources and were more in tune with the people around them. The results indicated that one year from their admission, the patients had stabilized, were less pathological and more in tune with their environment.

The period of time when the patients were on their own, i.e., from discharge to one year from admission, showed continued improvement and the greatest stabilization. They became less hypomanic, possessed more control, and correspondingly felt more socially adjusted. They showed a greater potential for change, were more realistic in their perception of their surroundings and were more critical of their environment.

The results of these comparisons are summarized in Table 29 and show clearly the progressive change in the patients as a result of CCH treatment and increased stabilization with time.

Investigation IV

The major aim of this investigation was to determine the effect of treatment upon the employment and income status of patients resulting from the two treatment approaches. As anticipated, no differences were found between the two groups in gainful employment upon admission. Upon discharge, however, a dramatic difference was noted with significantly more CCH patients employed than ASH patients and with a significantly higher income. Moreover, there was an upward shift to a middle income range for patients treated at CCH. Since the emphasis at CCH was toward achieving independence, a great part of the treatment program focused on the patients' involvement in seeking employment. Emphasizing job security and supporting patients seeking jobs in order to become self-reliant played a major role in the CCH treatment program. These results clearly spell out the differences in the two treatment approaches.

Investigation V

The fundamental concern of this investigation was to determine attitudes toward the installation, treatment and mental illness between ASH and CCH at admission, at discharge and one year from admission. The predicted results held true at admission. CCH patients felt significantly more positive toward the installation and further from mental illness. These same results, however, did not hold true on the other two testings. It appeared that there was an initial impact of the house on patients. They had positive attitudes toward CCH. However, with time, there was no difference between the CCH and ASH groups. There was a similar attitude toward both treatment installations after treatment.

The surprising finding came in the comparison within the CCH group. A comparison of the admission test results to discharge and one year from admission and from discharge to one year from admission revealed results opposite to those predicted. As the patients stayed away from the installation, they became progressively more negative toward treatment and the installation. This may represent some denial on the patients' part as well as some negative attitudes toward having been ill. From admission to the time patients were fully on their own there was a growing tendency to regard treatment as less than a positive experience.

Investigation VI

The purpose of this investigation was to determine the effect of treatment on patients' attitudes toward themselves, others and the community. None of the comparisons showed any consistent results. There were no differences between ASH and CCH nor were there any within the CCH group. It was difficult to determine the factors contributing to these results. The results may be due to the nature of the testing instrument. Perhaps the Semantic Differential test did not measure the more subtle attitudinal changes occurring. On the other hand it may be that there were few, if any, changes occurring in attitude as a result of treatment. Possibly, basic attitudes toward others may be expected to remain in spite or treatment. In any case, no significant differences or clearly defined trends were found.

Investigation VII

The basic aim of this investigation was to determine those variables which would predict successful and unsuccessful treatment at CCH. The first two comparisons involving attitudes did not shed any light on the question. Successful patients were not found to have a more positive attitude toward treatment or the installation upon admission, as predicted. Furthermore, in the exploratory investigations none of the psychological tests variables indicated any particular strength in differentiating between successful and unsuccessful patients. The demographic data, however, was useful in distinguishing more effectively between the two groups. The successful patients were found to be older and in general had a better work history in terms of number of jobs held, income and skills. These results indicated that the more successful patient in the CCH project was one who had more experience with and a greater drive and desire for doing things which involved real life situations, particularly regarding an occupation. The more determined, hard-working and conscientious patient was more apt to be successful.

B. Overview of Total Research Findings

The results of the investigations indicated that CCH is an effective alternative to hospitalization. Not only can patients be treated more effectively but also in a shorter period of time. While no particular differences emerged with regard to change in pathology comparing CCH patients to ASH patients, specific types of changes showed a trend in the CCH patients toward a more active, productive means of dealing with personal problems. This more effective approach to dealing with real life problems was directly related to fewer relapses and greater vocational success associated with improved income.

The results of this study would further indicate that both treatment facilities are effective in reducing pathology and that changes in attitude for the most part remain somewhat similar over time. What seems to be the difference between the two groups is that the CCH treatment approach is more practical, more functional, more realistic, more related to the everyday needs of the patient. This treatment approach at CCH has been entitled the "Life Management" approach.

The general treatment approach of most hospitals or clinics has been the emphasis upon reduction of pathology. It has been assumed that reduced pathology leads to better mental health and thus a more productive life. Unfortunately the results of this study would indicate that, although pathology may be reduced, there is no assurance that the patient is ready for the practical aspects of life. More specifically, he may not be able to take care of himself in a work situation. In the "Life Management" approach the emphasis is on effective everyday living.

Everything from the practical aspects of routine everyday personal chores to actively seeking employment is stressed. The focal point is on what the patient is doing today to handle today's problems rather than on the gaining of personal insights related to yesterday's failures. He is rewarded for taking care of himself and tending to his own needs. This particular philosophy places the emphasis more on what the patient is doing than on what he is feeling. As he alters his behavior to include constructive methods of dealing with daily situation he experiences the self-satisfaction and positive reinforcement of meeting his own needs.

C. Implications

Various implications can be derived from the research results which have important ramifications for the treatment of acutely ill mental patients.

Treatment of Choice

The number of advantages in treating patients in a community setting as shown by the research results indicate that it might very well be the treatment of choice for a large majority of patients. The first of these advantages is the very fact that acutely ill patients can be treated effectively in a community residential setting. Moreover, the treatment appears to take a shorter period of time, thus resulting in a greater potential for turnover. The patient is able to function much better in terms of handling his own needs. There is also indication that his chances of being rehospitalized are lessened. These overall advantages point to the need for establishing and maintaining more residential facilities similar to CCH where the treatment philosophy does not fall within the strict medical-model concept.

Pathology

The results indicated that a community facility such as CCH is able to cope with and treat patients who are far more pathological than had been anticipated. CCH patients were more pathological upon entrance but soon reached the same lower level of pathology as ASH patients. There was a tendency for the pathological level to stabilize at a lower degree after discharge, indicating that treatment at CCH had a longer range effect. This type of treatment had a disrupting effect on symptomology with the patient showing more indicators of active rather than passive orientation to solving problems. This effect was reduced with time and eventually stabilized at a lower level. Also, as the study progressed over a four year period, it became evident that more and more patients manifesting greater pathology with increased community risk were admitted and treated effectively. The implication here is that community health services may have long been underestimating its potential for successfully treating acutely disturbed patients in an open-door residential setting.

Economy

The research results had great economic implications. A lower rehospitalization rate and shorter treatment time both have economic value. A vital economy factor to be further considered here was that the patients from CCH were more apt to be employed during and after treatment than were patients from ASH. Not included in the research was the fact that the CCH cost per patient day was considerably lower than the ASH cost resulting in a noteworthy savings. In short, lower relapse rate, shorter treatment period, a low cost per patient day, increased employability, and greater income potential add up to a very effective treatment method with the least economic stress on the patient, his family and his community.

Attitudes

Attitude changes reflected some interesting implications. Patients were more positive about being treated in the community at admission, but became progressively more negative about treatment and the facility at discharge and one year later. The expectation that patients would feel positive toward treatment and facility may have been more a reflection of the professional staff's needs rather than a realistic expectation. A positive attitude toward treatment and place of treatment may not be a prerequisite for recovery. The CCH approach--having patients confront their personal problems on a daily basis--may lead to recovery and possible appreciation for treatment but not necessarily to the development of a more positive attitude to treatment. It is possible that the results simply indicate that people do not like the idea of being mentally ill. The one attitude change that was evident and important was the more positive attitude the patient had toward himself at discharge, which is a primary goal of treatment.

Psychological Testing

Psychological testing provided interesting observations in regard to use and value. These testings were valuable in assessing changes in the ASH and CCH groups. Furthermore, they were able to show the changes occurring at CCH as a result of the type of treatment being employed. In this respect they did an effective job.

On the other hand, the results of this research project clearly indicated that the psychological tests used were of no value in predicting success. They were unable to reveal any information which would be of use in determining the type of patient who could most benefit from the form of treatment being employed at CCH. The test results did not differentiate between those patients who benefited most from treatment at CCH and those who benefited least. These findings raise a question as to the value of psychological testing as an intake screening procedure.

A final aspect of psychological testing was the utilitarian value the tests may have had in understanding and treating patients if they were available to the clinicians. In retrospect, the test results could have provided valuable information about the dynamics of each patient which could have been used by the clinician. In this respect psychological tests could be useful in the treatment process. However, their use in predicting prognosis is another question.

Employment

The most dramatic differences in this research project were reflected by the results related to employment. Ordinarily, in-patient treatment for mental illness involves being removed from the community, reducing the probability of consistent employment or employment at all. Hospitalizing a patient conveys a message to him that he is incapable of working and that he cannot function in society. At CCH, the patient in his course of treatment was expected to maintain employment or seek out employment if he was without a job. In a sense, the employment status evidenced in the two groups dramatically emphasizes the differences in the two treatment approaches. At CCH, employment was a major part of the treatment program anticipating that patients would gain more independence, self-respect and self-confidence in the process. It was the CCH philosophy that patients who were employed or actively seeking employment were involved in a process of caring for themselves rather than being cared for. In some instances the individual was able to use his employment as a resource for working on personal problems. To remove him from his work would close the door to an important adjunct to treatment and rehabilitation. Most treatment facilities and hospital facilities have the philosophy that as the patient's level of pathology drops he becomes more capable of seeking out and holding a job. It may be just as true for some patients that seeking and holding a job could effect a reduction in pathological symptomology.

In this study the best predictor of success regardless of diagnoses, treatment procedures, etc., was the patient's work history. It was a more direct reflection of his emotional strength. The results of the study indicate that the clinician should take the patient's work history into consideration when developing the treatment and rehabilitation program. Moreover, the treatment and rehabilitation program should be closely coordinated from initial contact with the patient to include a plan for meaningful employment.

Without question, the results of this study clearly demonstrated the value of employment as a facet of treatment in assisting the patient to achieve optimal levels of functioning.

V. SUMMARY

Patients needing hospitalization were randomly assigned to treatment at Agnews State Hospital (ASH) or a residential treatment facility in the community called Community Care Home (CCH). Psychological tests, including the Wechsler Adult Intelligence Scale (WAIS), Rorschach, The Minnesota Multiphasic Personality Inventory, Semantic Differential and Draw A Family Test were administered upon admission. All tests except the WAIS were administered again at discharge and one year from admission. Demographic information on each patient was also tabulated, including background and treatment data. Comparisons on test results and demographic data were made between the ASH group and the CCH group for the three different testing periods. A second type of analysis was made within the CCH group. Comparisons were made of the test data at admission to discharge, admission to one year from admission, and from discharge to one year from admission.

The results indicated that patients in the acute stages of psychiatric illness could be treated effectively and within a shorter period of time in a residential community setting. There was a clear trend indicating that the rehospitalization rate was higher for the ASH group although no significant statistical differences were found. CCH patients manifested more pathology upon admission into the installation than did the ASH group but the two groups showed similar reduction in pathology at discharge and one year from admission. Within the CCH group there was a more gradual but definite trend to reduced pathology particularly of the types reflecting repression and withdrawal. CCH patients appeared to become more active in dealing with their daily personal problems. There were no differences in employment status at admission. However, the CCH group showed a greater achievement of employment and a larger income increase at discharge as compared to the ASH group. Although more positive attitudes toward the installation were noted in the CCH group at admission, no differences between the two groups in attitude toward the installation were noted at discharge or one year from admission. No differences in attitude toward others were noted for any of the comparisons, either between the ASH and CCH groups or within the CCH group.

Attempts were made to determine variables that would be able to predict CCH treatment success. The psychological tests were unable to determine any variables that were capable of prognostic prediction. The demographic data revealed several variables predicting success. The variables for the most part were related to work history, including the number of previous jobs, skills and previous income. Other findings indicated that successful patients were also older and had more months of previous hospitalization.

These overall results were seen as supporting CCH "Life Management" approach toward treatment. This type of treatment can be defined as one which includes emphasis on teaching the patients the functional and practical things in every day living particularly those things which help him attain economic independence and emotional stability. This is most relected in the patient's improved employment status and achievement of increased stability with the passage of time.

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APPENDIX A

DIAGNOSTIC CATEGORIES FOR ASH AND CCH PATIENTS

	ASH		CCH	
	F N=14	M N=22	F N=24	M N=38
I. Psychotic Disorders	58	63	70	82
A. Schizophrenic Reactions	41	59	65	77
1. Chronic Undifferentiated	16.5	21	20	44
2. Acute Undifferentiated	00	12.5	5	3
3. Schizo Affective	8	12.5	20	7.5
4. Paranoid	16.5	4	10	15
5. Catatonic	00	9	5	7.5
Childhood	00	00	5	00
B. Affective Disorders	17	4	5	5
1. Manic Depressive Reaction Manic Type	8.5	4	00	00
2. Psychotic Depressive Reaction	8.5	00	5	5

APPENDIX A (Continued)

DIAGNOSTIC CATEGORIES FOR ASH AND CCH PATIENTS

	ASH		CCH	
	F N=14	M N=22	F N=24	M N=38
II. Personality Disorders	17	29	25	10
A. Personality Pattern Disturbance	00	13	5	5
1. Inadequate Personality	00	13	00	2.5
2. Schizoid Personality	00	00	5	2.5
B. Personality Trait Disturbance	17	8	15	5
1. Emotionally Unstable Personality	17	8	15	5
C. Sociopathic Personality Disturbance	00	8	5	00
1. Antisocial Reaction, without qualifying phrases	00	4	5	00
2. Antisocial Reaction, with neurotic reactions	00	4	00	00

APPENDIX A (Continued)

DIAGNOSTIC CATEGORIES FOR ASH AND CCH PATIENTS

	ASH		CCH	
	F N=14	M N=22	F N=24	M N=38
III. Psychoneurotic Disorders	25	8	5	5
1. Psychoneurotic Reaction, depressive	25	4	5	5
2. Psychoneurotic Reaction, anxiety	00	4	00	00
IV. Transient Situational Personality Disorders	00	00	00	3
1. Adult Situational Reaction	00	00	00	3

APPENDIX B

PERCENTILE COMPARISON OF ASH AND CCH PATIENTS ON DEMOGRAPHIC DATA

	ASH			CCH		
Variable	Female N=14	Male N=22	Total N=36	Female N=24	Male N=38	Total N=62
Religion						
None	.08	.12	.10	.08	.19	.15
Protestant	.69	.59	.61	.63	.52	.55
Catholic	.23	.29	.29	.25	.24	.25
Other	.00	.00	.00	.04	.05	.05
Veteran						
Non-Veteran	.92	.50	.64	100	.49	.69
Veteran	.08	.50	.36	.00	.51	.31
Marital Status						
Single	.38	.46	.44	.36	.58	.49
Married	.23	.23	.23	.20	.16	.17
Divorced*	.39	.31	.33	.44	.26	.34

*Includes: divorced, separated, widowed, divorced-remarried

APPENDIX B (Continued)

PERCENTILE COMPARISON OF ASH AND CCH PATIENTS ON DEMOGRAPHIC DATA

	ASH			CCH		
Variable	Female N=14	Male N=22	Total N=36	Female N=24	Male N=38	Total N=62
Rank Among Siblings						
1st born	.25	.50	.41	.32	.38	.36
Other	.75	.50	.59	.68	.62	.64
Parents' Marital Status						
Married	.50	.56	.54	.25	.42	.35
Divorced**	.50	.44	.46	.75	.58	.65
Suicide						
None	.45	.62	.57	.17	.42	.32
Threatened	.55	.38	.43	.83	.58	.68
Violence						
None	.82	.65	.71	.65	.50	.56
Violence	.18	.35	.29	.35	.50	.44
Arrests						
None	.83	.31	.47	.66	.43	.52
Arrested	.17	.69	.53	.34	.57	.48

**Includes: divorced, separated, widowed, divorced-remarried, adopted

APPENDIX B (Continued)

PERCENTILE COMPARISON OF ASH AND CCH PATIENTS ON DEMOGRAPBIC DATA

	ASH					
Variable	Female N=14	Male N=22	Total N=36	Female N=24	Male N=38	Total N=62
Trouble with Law						
None	.69	.60	.63	.58	.39	.47
Trouble with law	.31	.40	.37	.42	.61	.53
Employment at Admission						
Unemployed	100	.81	.87	.88	.78	.82
Employed	.00	.19	.13	.12	.22	.18
Non-union-Union						
Non-union	.67	.58	.61	.96	.76	.84
Union	.33	.42	.39	.04	.24	.16
Type of Job						
Unskilled	.50	.65	.61	.40	.40	.40
Semi-skilled	.50	.35	.39	.60	.60	.60

APPENDIX B (Continued)

MEAN COMPARISON OF ASH AND CCH PATIENTS ON DEMOGRAPHIC DATA

	ASH			CCH		
Variable	Female N=14	Male N=22	Total N=36	Female N=24	Male N=38	Total N=62
Age	30.6	29.4	29.8	27.1	28.1	27.7
# of Siblings	2.6	3.1	2.5	2.35	2.97	2.73
# of Patient's Children	2.2	1.2	1.5	1.75	.92	1.24
Age at Family Breakup	12.8	13.9	13.5	6.47	10.28	8.19
Age at First Treatment	25.8	27.6	26.9	22.89	24.50	23.96
Age at First Commitment	28.8	26.4	27.2	24.83	25.32	25.13
Years of Education	13.0	11.3	11.9	11.64	12.37	12.10

APPENDIX B (Continued)

MEAN COMPARISON OF ASH AND CCH PATIENTS ON DEMOGRAPHIC DATA

Variable	ASH Female N=14	 Male N=22	 Total N=36	CCH Female N=24	 Male N=38	 Total N=62
# of Previous Hospitalizations	1.2	.8	.97	1.83	1.63	1.71
Months Previous Hospitalization	2.8	5.8	4.4	8.21	7.76	7.94
# of Jobs Mentioned	2.1	2.8	2.6	2.25	3.05	2.74

APPENDIX C

REFERRAL SOURCES FOR CCH OTHER THAN AGNEWS STATE HOSPITAL ADMISSION WARD

No. of Patients	Referral Source
6	Rehabilitation Mental Health Services
4	Private Therapist
4	Department of Vocational Rehabilitation
3	Valley Medical Center
2	Bureau of Social Work
1	Good Samaritan Hospital
1	Bureau of Social Work
1	Juvenile Probation Office
1	Stanford Medical Center
1	Family Service Association
1	Catholic Social Services